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With Which Is Combined

PAPER

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Jesse H. Neal to be Gen. Mgr. of A. P. & P. A.

S. L. Willson, President of the Association, Announces the Appointment Under a Resolution Passed at the Annual Convention in February Providing for a Reorganization of the Association—New General Manager Has Rich Background of Practical Experience in Organization Work and Cooperative Association Activities

On Saturday of last week S. L. Willson, president of the American Writing Paper Company, Holyoke, Mass., and president of the American Paper and Pulp Association announced the appointment of Jesse H. Neal, as general manager of the association. The appointment was made in pursuance of a resolution adopted at the annual meeting in February providing for a reorganization of the Association. Mr. Willson's announcement follows:

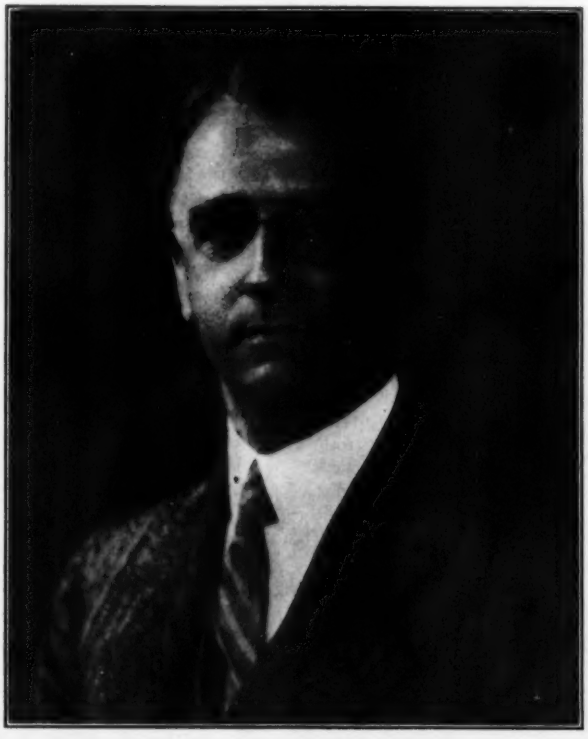
Mr. Willson's Announcement

Under a resolution passed by the American Paper and Pulp Association at its Annual Meeting in February, the question of the development of a plan for the reorganization of the association was referred to the president and executive committee for consideration, and authority given to them to inaugurate a program having for its object the protection, promotion and perpetuation of the paper industry and the strengthening of the association.

The executive committee's first efforts in carrying out the expressed wishes of the Association members was to find a man having the necessary qualifications to plan for and to capably manage the association's activities. Conferences were held with several men whose ability was outstanding. In the selection made greater consideration was given to previous experiences and accomplishments in cooperative association activities, and particularly that type of previous experience which could be applied in successfully carrying out the wishes of our members.

Your executive committee believes it has secured the best available man for the position and takes pleasure in announcing the appointment of Jesse H. Neal, as general manager of the association, a new position created in which his entire time, energy and ability will be devoted. Mr. Neal assumes his new duties with a rich background of practical organization experience. For eleven years he was widely known both here and abroad, as the executive secretary of the Associated Business Papers, Inc., and incidentally was the first man to fill that position also.

During the same period he was secretary-treasurer of the Associated Advertising Clubs of the World; treasurer, National Better Business Bureau; Director, Federal Division of Advertising during the War; secretary, National Advertising Commission; secretary-treasurer, Publishers Advisory Board; director, New York Advertising Club; director, Technical Publicity Association, and vice-president, Trade Association Executives. In connection with these various activities he represented national publishing interests before committees of Congress and government departments.



JESSE H. NEAL, GEN. MGR., A. P. & P. A.

Mr. Neal was the official head of a delegation of five hundred publishers and advertising men who went to Paris, France, in 1924 as the guests of the French press. While there he was decorated with the Cross of the French Legion of Honor for services to France and Advertising.

He has seen service on three daily newspapers; was sales manager of one and general manager of another manufacturing concern, and was vice-president and manager of an important advertising agency.

He came East from St. Paul, Minn., where he was prominent in civic affairs as President of the Famous Town Criers' Club which sponsored advertising under state and municipal auspices.

Since the successful administration and the benefit from the

(Continued on page 80)

Ernst Mahler Heads New Paper Institute

Many Representative Paper Men Are Among the Additional Officers of the New Department of Lawrence College Which Was Recently Announced—A Technical Director of Research and Instruction Will be Appointed Soon—Big Enrollment in Safety School

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., November 4, 1929.—With the election of a board of trustees of which Ernst Mahler is president, the newly founded Institute of Paper Chemistry at Lawrence College, Appleton, Wis., is on its way. A technical director is to be named soon to take charge of the research and instruction.

Mr. Mahler, the president-elect, is one of the vice-presidents and is general superintendent of the Kimberly-Clark Corporation, Neenah, Wis. Other trustees are: D. C. Everest, vice president and general manager of the Marathon Paper Mills Company, Rothschild, Wis.; Monroe A. Wertheimer, president of the Thilmany Pulp and Paper Company, Kaukauna, Wis.; Hugh Strange, president of the John Strange Paper Company, Menasha, Wis.; D. K. Brown, vice president of the Neenah Paper Company, Neenah, Wis.; L. M. Alexander, president of the Nekoosa-Edwards Paper Company, Nekoosa, Wis., and Dr. Henry Merritt Wriston, president of Lawrence College. The officers chosen besides Mr. Mahler were: D. C. Everest, vice president; Dr. Wriston, secretary and director of the institute; R. J. Watts, treasurer, and Westbrook Steele, executive secretary.

Twenty-four Wisconsin paper mills are represented in the institute. They have subscribed a fund of $300,000 to start the project. It is estimated that the annual budget will be $60,000, so the present fund will last for five years, or will be equal to endowment for the college approximating $1,000,000.

Housing facilities will be chosen at once by the board of trustees for the proposed laboratory, and research equipment also will be provided. An adequate library also will be maintained in connection with this work.

As now planned, the institute will offer graduate training supplementary to undergraduate study at Lawrence College in the field of paper chemistry. Students eligible for matriculation must be graduates of a four year college course and must have served an apprenticeship in paper mills. Institute students will work in pairs, one studying in the Institute while the other is employed in mill laboratories.

S. L. Willson, president of the American Pulp and Paper Association says of the institute: "I wish to express hearty approval of the action of the manufacturers. It is a well known fact that the paper industry has suffered from a lack of men trained in scientific subjects pertaining to pulp wood, pulp, and paper, and this advanced action by Wisconsin manufacturers will, I feel confident, be followed later in different parts of the country."

Big Enrollment in Safety School

More than 600 persons have enrolled in the safety school at Neenah and Menasha, Wis., the principal paper mill cities of the Fox River Valley. This is the school's second year, and a strong program has been outlined. Meetings will be held every week until the holidays and will include the following speakers: Victor L. Noonan, Rockford, Ill.; Officer Mulcahey, St. Paul; George P. Hambrecht, state vocational director; C. K. Boyer, manager of the Interlake Pulp and Paper Company; Ernest Corn, National Safety Council, Chicago; D. D. Fennell, Chicago, and Capt. Denny P. Upton, New York City. Officials of various co-operating mills will act as chairmen of the sessions.

Little Wolf Power Co. To Build Dam

Construction of a power dam adjacent to the paper mill districts of Wisconsin is contemplated by the Little Wolf Power Company. The company wants to build a hydro-electric dam on the Little Wolf River and has made application to the Wisconsin Railroad Commission to do so.

Another improvement is the expenditure of $25,000 now and $50,000 later on the harbor at Green Bay, Wis., where some of the paper mills receive their coal and other supplies by boat through the Great Lakes. Dredging will be conducted to widen the channel at several points so large boats will have turning basins and can reach their docks more conveniently.

Nekoosa-Edwards Gives Free Air Rides

A unique means of building good will between employer and employee was undertaken during the late summer and fall by the Nekoosa-Edwards Paper Company, Nekoosa, Wis. Workers and their families were invited to take free rides in the company's Nepco tri-motored cabin monoplane. Invitations were sent to 250 workers each week, and they were allowed to make reservations for themselves and families for a sightseeing trip of the vicinity. The total number accommodated during twelve Sundays was 2,640. Passengers were covered by company insurance while aloft.

Recognition has been given the company's aviation activities through the appointment of J. E. Alexander, general manager, as a member of the aviation committee of Wisconsin department of the American Legion.

Machinery Removed From Union Bag Mills

Reports that the mill at Kaukauna, Wis., abandoned by the Union Bag and Paper Company might be started up again by other paper interests have been nullified by the fact that the Fox River Veneer and Basket Company has taken possession of the building and will use it for manufacture of its products. The paper machinery has been removed and basket making materials take its place.

L. M. Alexander Honored by Lawrence

L. M. Alexander, president of the Nekoosa-Edwards Paper Company, Nekoosa, Wis., was honored by Lawrence College, Appleton, Wis., when its new $400,000 gymnasium was dedicated this week. Mr. Alexander was one of the principal donors to make the project possible, and also gave the college the original gymnasium building which will be abandoned in favor of the new one. Mr. Alexander is president of the college board of trustees and also was instrumental in establishing the newly founded institute of paper chemistry in connection with the school.

Frank Hoberg Dead

Announcement is made of the death of Frank Hoberg, organizer of the Hoberg Paper and Fibre Company, Green Bay, Wis. He was president and general manager for many years. Mr. Hobert had been ill for six months and death came while he was confined in a sanitarium in Chicago. He was sixty years of age.

Announcement is made also of the death of Louis F. Woelz, of Appleton, Wis. He was the father of Fred W. and George W. Woelz, owner of Woelz Bros., paper jobbers of Appleton.

Paper Shipments from Holyoke Expedited

HOLYOKE, Mass., November 5, 1929.—One of the heaviest trains consisting of 60 cars sent out of Holyoke of recent years went over the Holyoke & Westfield railroad Tuesday afternoon and was routed to the Cedar Hill classification yards at New Haven where it was broken up and re-routed to the big centers of the country. The cars contained mostly job lots of paper demanded for spot delivery. New York jobbers increasingly are calling up in the morning and want their goods in New York the following morning.

The "ferry car" system was abandoned some time ago and trucks are now used to bring the odd lot shipments of paper from the mills to the freight houses.

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Let us show you how this new machine works. Write for our bulletin.

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BIRD MACHINE COMPANY
SOUTH WALPOLE ★ MASSACHUSETTS

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USE BIRD CENTRIFINERS

3427

Industry Concerned About News Print Price

Several Conferences Regarding Prices Are Held in Montreal But No Official Announcement is Made—Coming into Production of the New 250-Ton Mill of the Mersey Paper Co. Makes Prospect of An Advance for 1930 Seem More Remote—What Leaders Think

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., November 4, 1929.—The main subject of interest in the industry here at the present time is the question of price quotations for 1930 news print. A number of conferences on the subject have taken place in Montreal, but no official announcement has been made. One of the factors in the situation is that in the new 1929 International Paper Company's contract it was provided that notice would be given on or before November 30 next of any increase in price for 1930. Another factor is that the company has a contract with the Hearst interests for five years, and that as the International's policy is one of one price to all customers, no increase is likely except by arrangement with the Hearst interests.

Then again, according to newspapers here, the coming into production of the 250-ton mill of the Mersey Paper Company has complicated matters. The company has kept itself independent of the Canadian Newsprint Institute, and therefore is not subject to control either as to output or price. The 1930 output of the company has all been sold, it is said, on a cost laid down basis which works out lower even than the moderate price fixed by the Institute. In some quarters the price is said to be $2 per ton lower; in other quarters it is said to be $3 lower.

There have been rumors of overtures having been made towards buying out the Mersey Company, but there is no sign that the owners view the prospect of selling with any enthusiasm. The company's mill being in Nova Scotia adds to the difficulties of the situation, for the Nova Scotia government made concessions to the company in order to get news print manufacture started in that Province, and would not be likely to view with approval any action which would limit the output of its first news print mill. On the other hand, if mills in Ontario and Quebec were to lower their prices to meet the Nova Scotia competition, there would be stiff opposition from the governments of both these provinces, who object to the natural resources of the provinces being exploited on a non-profitable basis.

The present situation in regard to price is not at all satisfactory. What leaders of industry here think of it is indicated by a reference to the subject by E. W. Beatty, the president of the Canadian Pacific Railway, who, during the week made the following statement:

"It is generally true that in exploitation and development of our natural resources great progress has taken place in the last few years. There have been some setbacks, notably recently in the news print situation, and we can only trust that it will be of a temporary character, because it would be little short of a tragedy if what has become a great basic Canadian industry should suffer by reason of over-reaching, destructive competition, over-production or lack of cooperation, and we can only assume, as I think we should assume, that the astute gentlemen of great commercial acumen who preside over the destiny of that great industry will, with the assistance of Premier Ferguson and Premier Taschereau, find a way to correct a situation, which must, if permitted to continue, result in serious damage to Canadian interests. There are other disturbing factors and we may conceivably, for a few months, have to take careful stock of our situation."

Consolidation is Assured

It is announced that majority control of the stocks of both Wayagamack Pulp and Paper Company and Port Alfred Pulp and Paper Corporation have been deposited for exchange into the securities of the Canada Power and Paper Corporation. This further consolidates the position of the latter corporation and gives it much additional power and scope. It will increase the number of Canada Power's common shares outstanding to 1,218,000, and the value of its debentures in the hands of the public by $6,666,660. As the common stock capital authorized is only 750,000 shares, steps have been taken to increase the number to 2,000,000 shares.

In addition to the creation of more common stock and debentures, Canada Power and Paper will assume the preferred stock and bonds of Port Alfred and the bonds of Wayagamack, which aggregate in all some $27,016,867.

Thus the new capital set up of Canada Power and Paper will consist of $60,378,967 of underlying securities of absorbed companies, such as Belgo-Canadian, St. Maurice Valley and the present two, $35,466,660 of Canada Power and Paper debentures and 1,218,000 shares of no par value common stock of the parent company.

Canadian Paper Products in Hong Kong

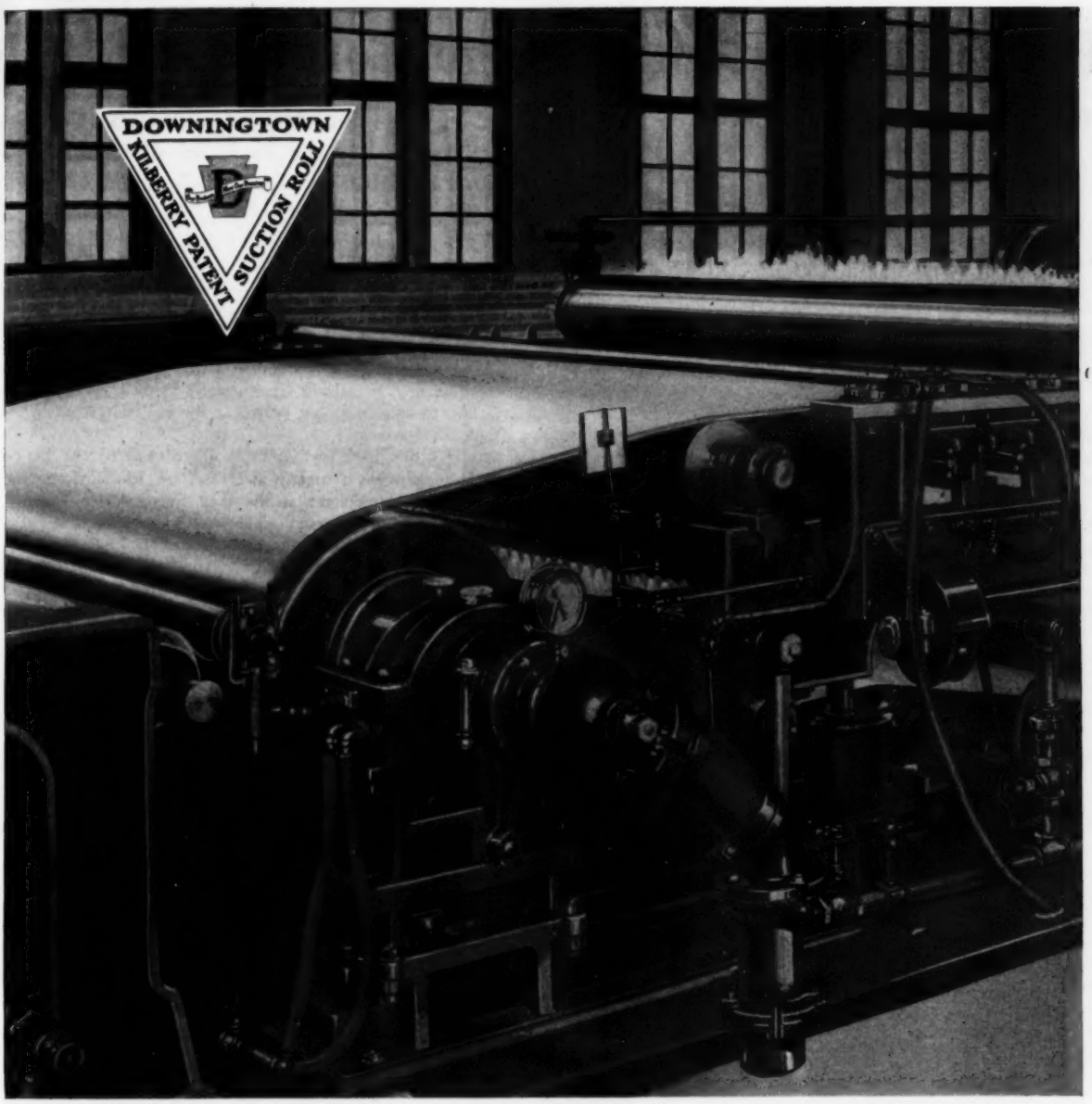
Several import houses in Hong Kong have recently approached the Canadian Trade Commissioner's office with reference to the possibility of establishing agency or buying connections with Canadian paper manufacturers, writes Paul Sykes, Canadian Trade Commissioner in Hong Kong. Most of these firms have had considerable experience in the paper trade, and are now interested in Canadian business on account of the favorable quality and price of these products. On account of the volume of trade in news print and kraft wrappings, more requests have been received for these types than for others, but bond and writings, waxed and other special wrapping papers have also been specified.

Marked in Central and North China

W. J. Riddiford, Assistant Canadian Trade Commissioner in Shanghai, writes that there is a considerable market for waste paper in Central and North China. Approximately $3,000,000 worth of this commodity was shipped from the United States during 1928, practically all of which was sent to the Orient. Old news print comprises almost all of the waste paper shipped. This old paper is used in China for a variety of purposes, but chiefly for cheap sun helmets, paper toys and dolls, fire crackers, and artificial flowers, and also for lining leather trunks and boxes. It is a common thing also in China to find purchases such as sea delicacies, peanuts, fruit, and roast pork wrapped in the pages of well-known American daily newspapers, while in certain North China parts waste paper is used in windows in place of glass.

Price Brothers' New Headquarters

During the week, J. H. Price, president of Price Brothers & Co., officiated at the laying of the corner stone of the new 17-story head office building which the company is erecting in Quebec City. The ceremony was carried out in the presence of a large assembly of representative citizens. The building will have an approximate height of 232 feet above the street level. The ground floor is to be 20 feet high, and the next 14 stories are each 11.9 feet in height. On top of these 15 stories two more of 18 and 20 feet, which will comprise the pent house, are to be erected, and on top of these an alcove roof of ten feet in height. Already steel construction has been carried to the 15th story, and the building is expected to be completed in June or July next.



Two and a Half Years' Service at Hinde & Dauch Paper Co.

This illustration shows the Kilberry Suction Couch Roll on the Downingtown Removable Fourdrinier in the mill of the above company at Trenton, Ontario, Canada. This machine is also equipped with a Kilberry Suction Roll at First Press. Simplicity, minimum parts requiring attention, and all adjustments made while machine is running are some of the exclusive features of the Kilberry Roll. Our Bulletin No. 103, gladly sent on request.

DOWNINGTOWN MFG. CO.
DOWNINGTOWN, PA., U. S. A.

Paper Demand in Chicago Continues Steady

Historical Crash in Stocks Does Not Apparently Affect The Paper Market—Demand For News Print Is Satisfactory and a Brisk Business Is In Progress for the Majority of Other Varieties of Paper—Dry Spell Strengthens Position of Ground Wood

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, November 4, 1929.—A damp, rainy week failed to offer any serious impediment to business in Chicago during the past week. The historical crash in the stock market also did not figure in reports coming today from Chicago paper houses. News print representatives reported a continued steady demand in that product with the mills keeping normally busy and with prospects for the next few months at least, bright.

Brisk business also characterized the majority of other grades. Ground wood papers picked up slightly. The market in this product is stiffening up and soft spots are disappearing as the inadequate rainfall begins to cause a noticeable shortage. As time goes on this shortage is expected to cause a very firm sort of a market with some speculation going on as to the price situation in ratio to the shortage. The higher grades of fine paper are reported fairly active while books and covers are about the same as last week. Tissues are fair. The board market is showing improvement according to reports. Krafts are feeling the benefits of increased business activity.

Plans for Annual Banquet

The big feature of the Chicago Paper Association's yearly program, the annual banquet, is to be held at the Bismarck Hotel, Chicago, on the evening of November 19. Although no speakers have been as yet lined up, an excellent speaking program is assured. The election of officers and some sparkling entertainment will otherwise fill up the evening. Not only will executives of member firms be present at the banquet but also department heads of the various member organizations.

Speakers for Salesmen's Meeting

The Monday, November 4, meeting of the Chicago division of the Salesmen's Association of the Paper Industry will be featured by the presence of Mr. Bryant of the Wisconsin Traffic Association, who will talk to the salesmen present on "Traffic Problems that Affect the Paper Salesman." President Harold Knott also announced the definite appearance of Mr. Sutcliffe, European Field Representative of the Import Committee of the Paper Industry, and Warren Bullock, general manager of the Import Committee, at the November 11 meeting.

An Ad for Better Envelopes

From the American Envelope Company comes a reprint of an advertisement of the Bureau of Envelope Manufacturers of America which appeared in a recent issue of a well known business publication. The heading "Eight Out of Every Ten Business Men Open Their Own Mail," is an effort to boost the buying and use of quality envelopes and a direct aid to the stimulus for the grade of paper used in envelope manufacturing.

Jim Coy Motors to Florida

Jim Coy of the Flambeau Paper Company, executive of the Salesmen's Association of the Paper Industry, and well known to hundreds of paper men, is at last taking a well earned vacation. Jim and his wife headed out of Chicago November 2 for a motor trip with Florida as their destination. The popular paper executive expects to return in about two weeks. If you ever attended a function of the Salesmen's Association you will readily understand the prominent part Mr. Coy has taken and will continue to take in boosting the selling of paper and the paper industry.

Artesian Bond

"Artesian Bond," manufactured by the Whiting-Plover Company of Stevens Point, Wis., and distributed in Chicago by the Midland Paper Company, is attracting attention from the printing fraternity. It is a hand-sorted, loft-dried sheet with liberal rag content and is reported clear and even in color.

C. H. McDuffee Leaves Claremont Paper Co.

CLAREMONT, N. H., November 1, 1929.—Clarence H. McDuffee, for 31 years general superintendent at the plant of the Claremont Paper Company, is retiring from active service as of November 1, according to announcement posted at the mill this week by Manager W. C. Dawson.

Mr. McDuffee came to Claremont 31 years ago from the Tileston & Hollingsworth Company, at Hyde Park, to assume the duties of general superintendent at the then Sugar River Paper Mill owned by John T. Emerson. The mill was taken over by John Flint in 1902 and renamed the Claremont Paper Company and in 1918 the plant passed into the ownership of the Brompton Pulp and Paper Company, Mr. McDuffee continuing as superintendent under the succeeding owners. He has long been recognized as one of the foremost men in his line of work and his knowledge, experience and zeal have played no small part in the success of the local plant.

While retiring from active participation in the business of the company, Mr. McDuffee is retained in an advisory capacity. He is also president of the Claremont Railway Company.

William A. Kirn, who has been with the Claremont Paper Company for 15 years as production engineer, has been appointed to succeed Mr. McDuffee as general superintendent. Prior to 1914, Mr. Kirn was engaged in the manufacturing of paper making machinery with Pusey & Jones of Wilmington, Del., and George F. Shevlin Company of Saratoga, N. Y.

R. J. McConnell has been named first assistant superintendent of the Claremont plant and F. E. Desmond has been appointed second assistant.

Michigan Concerns Merge

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., November 4, 1929.—A paper merger of importance in southwestern Michigan jobbing circles is announced in the amalgamation of the Johnson Paper and Supply Company, Kalamazoo, and the Lockway-Stouck Paper Company, Benton Harbor. The new concern will operate sales and stock warehouses in both cities and no change in the personnel is contemplated. John D. Johnson, founder of the Johnson Paper and Supply Company, retains his interest in the new corporation and will be active in the operation of the Kalamazoo unit.

The merged concern will carry the corporate name of Lockway-Stouck Paper Company and has a paid up capital of $126,000. The officers are: President, George Lockway, Kalamazoo; vice president, W. W. Butcher, Benton Harbor; general manager, M. G. Stouck, Benton Harbor; secretary-treasurer, A. F. Stouck, Kalamazoo. The officers and John D. Johnson comprise the board of directors. A. F. Stouck has moved to Kalamazoo from the east to become identified with the new concern.

Johnson Paper and Supply Company had its beginnings back in 1893, being organized by John D. Johnson. It has enjoyed a steady, healthy growth and for years has been located in its own warehouse at 522-524 North Burdick street. This unit will operate with its present staff. Lockway-Stouck Paper Company's plant in Benton Harbor is at Park and Fifth streets.

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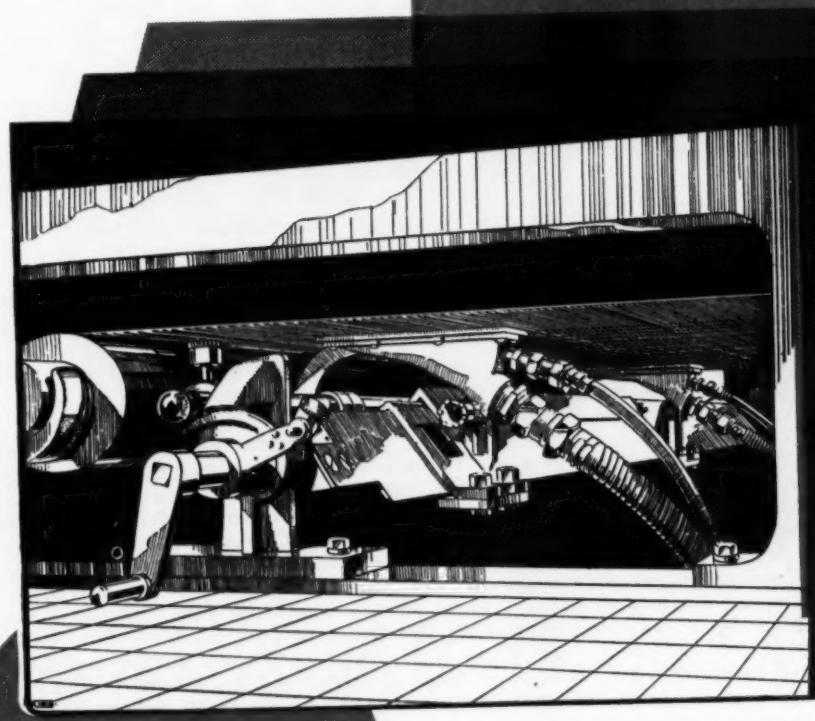
Another, because they maintain uniform felt conditions and thus improve the finish of the paper.

Another, because they increase felt life.

No matter what kind of paper you make, you can make more of it, or make it better—or both—with Vickery Felt Conditioners.

Let us tell you how you can try a Vickery Felt Conditioner on one of your own felts—at our expense.



BIRD MACHINERY

BIRD MACHINE COMPANY

SOUTH WALPOLE

MASSACHUSETTS

Demand for Paper in Boston Holds Up Well

October Business Was of Good Proportion and In Some Cases Ahead of Last Year—Depression in Stock Market Does Not Appear To Have Affected Paper Business Although It Is Expected that Interest in Business Will Increase When Orgy of Speculation Is Over

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., November 4, 1929.—October business in the paper trade here was put through with a good volume of orders and in some cases the amount was ahead of that of last year. Values of both fine and coarse lines have held firm and the prospect appears favorable for considerable more activity. The stock market does not seem to have affected the paper business locally to any material extent, although it is stated that possibly there will be still greater interest in the purchase of supplies when the minds of many are turned more towards "legitimate" operations than speculation.

No Improvement in Box Boards

No improvement of note can be seen in the box board situation. Quotations continue generally the same. In some quarters outside of Boston, notably Connecticut, prices seem to be tending lower instead of higher.

Paper Stock Quiet

Paper stock is somewhat quiet for the time of year. One dealer described it as "rather medium." Values remain at approximately the same levels, although there is a sagging tendency in foreign gunny bagging and manila rope. Foreign gunny No. 1 is quotable at 1.40 at 1.50, compared with a previous price of 1.50. Foreign manila rope is now at 4.37½ at 4.50, against a flat 4.50 previously and domestic manila rope at 4.50 at 4.75, against a former price of 4.75.

General News of the Industry

At a joint meeting of the sales forces of Carter, Rice & Co. Corporation and Storrs & Bement, agents in Boston of the Hammermill Paper Company, Erie, Pa., held at the Chamber of Commerce recently, H. R. Baldwin, manager of sales and assistant secretary, and Mr. Taft, both of the Hammermill Paper Company, gave talks in regard to lines of the company. The sales policy in regard to their latest line, Management Bond, was outlined. Management Bond is a sulphite sheet, of a lower grade than Hammermill Bond, which is made in the mill of the company in the state of Washington.

A meeting of the White Paper Division of the New England Paper Merchants Association was held at the Chamber of Commerce Tuesday, at which there was a general discussion of business problems.

Arthur E. Ham, as president of the New England Paper Merchants Association, was guest at a recent dinner of the Boston Stationers Association on invitation of George W. Pratt, president of the latter organization in connection with the promotion of closer acquaintance and friendship between stationers and paper merchants. During the discussion it was brought out, to the great satisfaction of all that the relations between the two lines of business were much more cordial and friendly in this vicinity than in some other parts of the country.

Sold six weeks ahead, the Deerfield Glassine Company, Monroe Bridge, Mass., is enjoying a very prosperous period. The trend of values in their product is towards greater strength and higher values. Prices of some grades have been marked up.

Harrie E. Waite, sales manager for John Carter & Co., Inc., who has been ill of pneumonia, recently underwent a major operation at the Newton Hospital, Newton, Mass. Mr. Waite is doing as well as could be expected.

A Hallowe'en costume party, an annual affair given by the Hollingsworth & Vose Company, was held at the Wednesday Club, East Walpole, Mass. Colored minstrel entertainers, pantomime, selections by the H. & V. Quartet, feature dancing, bridge and an apple ducking contest made an enjoyable evening, which was much appreciated.

In a recent contest in which the Falulah Paper Company, Fitchburg, Mass., offered prizes for suggestions for new uses of Falpaco Blanks, Wilbur Woodbury, of the Carter, Rice & Co. Corporation, received the grand prize of $25 for the largest number sent in during the contest. Mr. Woodbury in addition received $125 in other prizes. Several of the representatives of the Boston firm won prizes.

E. R. Lyman, secretary-treasurer of the Missisquoi Pulp and Paper Company, Sheldon Springs, Vt., called on the trade last week.

H. E. Lindquist, vice president and salesmanager of the Missisquoi Pulp and Paper Company, Sheldon Springs, Vt., has resigned.

Compensation Court Makes Awards

CARTHAGE, N. Y., November 2, 1929.—A number of injured paper mill workers were granted awards at a hearing this week before Referee James Richardson in Compensation Court. One of the largest awards ever granted in the local court was given to Gerald Schwendy, who was injured several months ago at the plant of the J. P. Lewis Company in Beaver Falls. He received approximately $3,900 for the loss of his right hand, the award being made at $20 a week for a period covering 195 weeks.

An award of $553 was made to Christian Van Dollin for the loss of the use of his left leg as the result of an injury at the Carthage Pulp and Board plant. The award was made at the rate of $16.03 for a period of 35 weeks. James Carl, who suffered the loss of his right index finger while working at the Deferiet plant of the St. Regis Paper Company, was awarded $332.58 to be paid at $14.46 weekly for 23 weeks. An award of $120 was also made in the case of William Hunt for lost time as the result of an injury received at the Carthage Pulp and Board plant. After considerable discussion in the case of Roswell Eichorn, who was injured while in the employ of the Carbola Chemical Corporation, of Natural Bridge, the referee awarded him the sum of $526.18 for lost time.

Silvertone Envelope Award

The Silvertone Envelope Award, a bronze plaque presented by the Standard Envelope Manufacturing Company, Cleveland, for the best envelope design submitted at the Direct Mail Advertising Association Convention held in Cleveland recently, was awarded to the United Autographic Register Company of Chicago, Ill., being part of a series. The winning design owed most of its attention value to the fact that it was a cutout envelope, showing a catalog on which the name of the prospect to whom the catalog was being sent was hand lettered in every case.

First honorable mention was given to Oxford Print of Boston, Mass., for their attractive design carrying their monogram in two colors.

Second honorable mention was given to the specialty Envelope Company of Newport, Ky., for a series of envelopes mailed to their trade which were unusually colorful, and certainly lived up to the slogan "The Envelope is the First Impression."

This is the second year the Envelope Award has been made, and the increasing interest in all envelopes which has been evidenced, makes it probable that next year the award will gain a great many new entries, when the convention is held at Milwaukee.

Kraft Pulp to Suit Every Requirement

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Specialists in Kraft Pulp

Agreement with Canadian Pulp Manufacturers

Accord Said To Be In Sight With Japan With Which Price War Has Been Going on For Some Time—Eastern Group of the Ontario Pulp and Paper Makers Safety Association Meets In Board Room of the J. R. Booth Co.—Tariff Ruling Helps Book Paper

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., November 4, 1929.—A report that an agreement will soon be reached between Canadian pulp manufacturers and Japanese manufacturers, who have been waging a price war for some time, has a definite bearing on the Canadian pulp industry, especially in British Columbia. A large volume of wood pulp has been exported from Canada to Japan in recent years, but keen competition has been met from the local manufacturers, who secure their raw material from the forests of the northern islands of Japan. Canadian mills have been supplying large quantities of pulp to Japanese at prices which are claimed to have caused a good deal of discomfort to the Orientals. Japanese have put forth strong arguments before the Government's commission, which is now sitting, to formulate a thorough revision of the tariff, in order to bring about an increased tariff on wood pulp. If this were successful it would place a serious check on Canada's expanding trade with Japan, and the combination of circumstances is thought to have been an important factor in the agreement which is expected to be reached shortly. In this connection it is pointed out that Canada profits from the fact that the standard of literacy is extremely high in Japan, one result of which is that a vast number of newspapers, magazines and books are published, which altogether have a tremendous circulation. This, in turn, demands a huge quantity of wood pulp from which to manufacture the paper, and of this Canada is one of the chief sources of supply.

Eastern Safety Group Met at Ottawa

The Eastern group of the Ontario Pulp and Paper Makers' Safety Association held a well attended meeting in the board room of the J. R. Booth Company, at Ottawa, a few days ago, under the chairmanship of A. N. Wismer, of Provincial Paper, Ltd., Mille Roche, Ont. Delegates representing paper company mills in Mille Roche, Cornwall, Hawkesbury and Ottawa were present and the accident records of the various mills was under spirited discussion. The annual contest of the Ontario Pulp and Paper Makers' Safety Association was considered and commended and the standing of the various companies analyzed. Classes in first aid were also under consideration and the opinion freely expressed that it was unfair that a greater number of mills did not enter into the spirit of the contest. As one of the delegates stated during his address: "The benefits to be derived therefrom are not confined to the mills or the personnel thereof, but the fact that men and women in the paper companies are trained in first aid work means that there are citizens available in the mill towns who can, on occasion, render first aid work in the event of an accident on the street or elsewhere. This makes for good and intelligent citizenship."

To Make Dominion-Wide Forest Survey

The proposed Dominion-wide census of the standing timber and pulpwood resources of Canada will commence early next spring, according to advices received by the Timber Crown Agents in the various provinces. Canada has had no check on the standing timber for a number of years, the reserves still remaining fixed at around 350 billion feet, despite the huge annual cut. Early this Spring representatives from the various provinces met Hon. Charles Stewart, Minister of the Interior, at Ottawa, when it was decided to make a thorough survey. Hon. F. P. Burden, provincial Minister of Lands, is in charge of the survey in British Columbia and department officials there are at present laying out a plan of campaign for the work. It is likely that numerous survey parties will be sent to various districts in the western province. Each party will include a surveyor, a timber cruiser and an agricultural expert. The whole scheme calls for spending more than a year on this work. When the results of the various provincial surveys are tabulated and forwarded to Ottawa it is likely that by 1931 the federal department of the interior will be able to find out just how long the Canadian pulpwood and timber industries will last. Methods may then be worked out to provide a perpetual stock by curtailing the cut and by extensive reforestation.

Tariff Ruling Helps Book Paper Trade

In connection with the slight falling off in orders for book papers in Canada of late, it is pointed out that the Minister of National Revenue has now cancelled the privilege in virtue of which exporters in other countries have hitherto been permitted to sell their goods in Canada at five per cent less than the sales price in the country of origin, without the dumping duty applying, and that, as from the 15th inst., imported goods of a class or kind produced in Canada will be subject to a special or dumping duty if the price in Canada is lower than the exporter's sale price for domestic consumption in his own country. The cancellation of this privilege should be of some advantage to the Canadian manufacturers of book papers. It has been contended that the book paper industry lacks that adequate tariff protection for which the industry has been striving for some time.

M. H. Jones, Fort William, Takes New Job

M. H. Jones, who for the past two years has been resident engineer of the Great Lakes Pulp and Paper Company's plant at Fort William, Ont., and formerly associated with the Canada Car & Foundry Co., Ltd., and the Port Arthur Shipbuilding Company, left recently for Montreal where he has taken a position as chief engineer to the Ontario Paper Company, with headquarters in that city. The Ontario Paper Company is undertaking a huge news print development in the lower St. Lawrence, including the establishment of a townsite and a power project, part of which Mr. Jones will supervise. Previous to his departure he was presented by the staff employees of Backus-Brooks Company and department heads of the Great Lakes Co. with a handsome set of pipes and an appreciative address.

C. P. R. President on News Print

Speaking at a dinner tendered him by the Chamber of Commerce at St. Catharines, Ont., this week, E. B. Beatty, president of the Canadian Pacific Railway, said in regard to the news print situation: "It is generally true that in exploitation and development of our natural resources great progress has taken place. There have been some set-backs, notably recently in the news print situation, and we can only hope that it will be of a temporary character, because it would be little short of a tragedy if what has become a great basic Canadian industry should suffer by reason of overreaching, destructive competition, overproduction, or lack of cooperation; and we can only assume, as I think we should assume, that the astute gentlemen of the great commercial acumen who preside over the destinies of that great industry will, with the assistance of Premier Ferguson of Ontario, and Premier Taschereau of Quebec, find a way to correct a situation which must, if permitted to continue, result in serious damage to Canadian interests. There are other disturbing factors, and we may conceivably, for a few months, have to take careful stock of our situation."

To Double Paper Mills Plans

Recent advices from Vancouver, B. C., say that it will be necessary to double the original plans for a pulp and paper plant at Prince George, B. C., on the Nechako River, in order to make it capable of yielding a return on the investment. This is the state-

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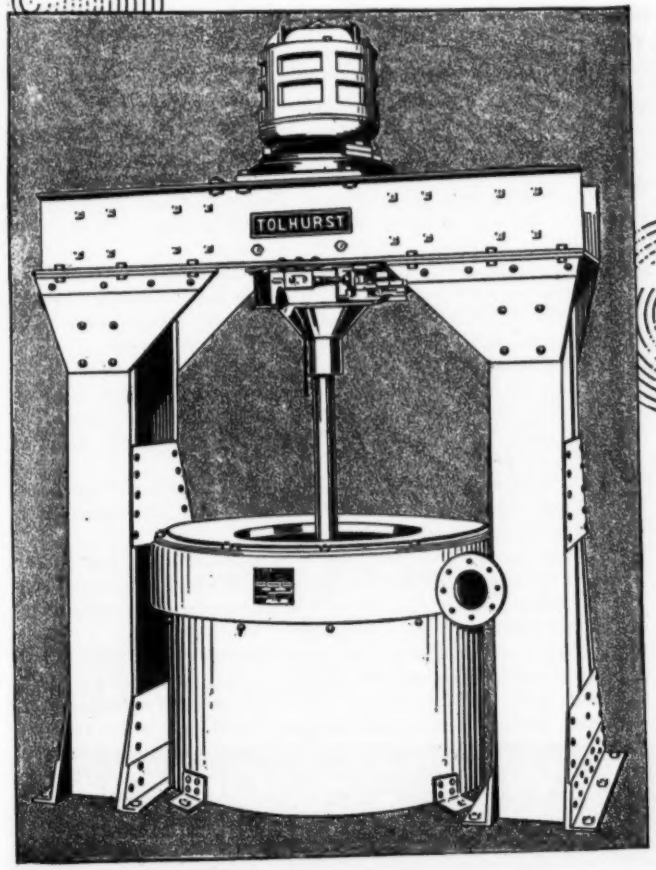

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ment of John Stadler and other engineering and power experts after completing a survey of the site for the new undertaking. Instead of an initial outlay of $3,000,000, as at first intimated, it would require an expenditure of at least $6,000,000 to harness the Nechako River and store sufficient water for the magnitude of the operations now being planned. In the opinion of Mr. Stadler the enterprise requires a paper mill with a daily capacity of 500 tons and about 100 tons of pulp suitable for the manufacture of artificial silk. Mr. Stadler, whose business career in the pulp and paper world has been a high record of probity and commercial integrity, is one of the big business men of Canada. Associated for twenty years with the Belgo-Canadian Paper Co., Shawinigan Falls, Que., he designed and put in operation the paper mill at Cornerbrook, Newfoundland, designed, built and put in operation the plant of Lake St. John Power and Paper Company, Dolbeau, and has been for many years the guiding spirit of many of Canada's leading pulp and paper enterprises.

Much Activity in Pulpwood Cutting

Considerable activity in the employment situation as regards pulp cutting and tie making operations in the Thunder Bay district of Ontario is reported by A. C. Wood, superintendent of the Port Arthur office of the Employment Service of Canada, in a recent report to the provincial head office at Toronto. The orders from local timber operators for all classes of bush workers has been exceptionally good, it is stated, but the jobs offered are not being grabbed off quickly, although there are sufficient men out of work to more than fill the demand. The wages offered are said to be fairly good, and it is thought the mild weather lately has led many men to walk around on the off chance of getting something better than already has been offered. Despite the generally quiet year, which will be ended this month, figures for the placements of men by the local office are expected to total over the 9,000 mark.

Pulpwood Activity in Nova Scotia

The Atlantic Pulpwood Co., a subsidiary of the Scott Paper Company, Ltd., with Nova Scotia offices at Annapolis Royal, has spent an active season cutting pulpwood in various sections of the province. Wood has been cut at various points in Cape Breton where the company has been operating extensively during the past four years, and a large quantity still awaits shipment to Pennsylvania. The company, through its manager, W. Roy Smith, of Annapolis, recently purchased a large tract of timberland from the Sonora Lumber Company in Guysboro County. The Atlantic company also purchased pulpwood cut by the Sonora company in Inverness and Richmond counties during the past summer. This company during the summer acquired several other smaller timber tracts, including the McFarlane property, consisting of some 400 acres in Cape Breton. Contracts for cutting have been given out to many small farmers throughout the island, and although the price paid is one dollar less per cord than last year no difficulty has been experienced in getting farmers to do the work. A large part of the pulpwood now being cut will be shipped in the spring from Mabou Harbor where shipping facilities are fairly good.

Newsprint Rail Rates Hearing Held Up

The appeal against increased freight rates on news print and other papers from Canada to the United States cannot come up before the Canadian Board of Railway Commissioners before the end of the year, Judge H. A. McKeown stated in Ottawa this week. Judge McKeown is anxious that the news print case shall be heard before the whole commission and that means delay. The board will hold hearings in Toronto for a week in November.

Considering Wall Paper Tariff Revision

The Minister of Finance at Ottawa is considering a revision of the tariff on wall papers and referred the question this week to the Advisory Board on Tariff. The Canadian Wallpaper Manufacturers, Ltd., which has a virtual monopoly of the wallpaper business in Canada, retorted by asking for still more protection. The present tariff on wallpaper is: British preference 22½ per cent; French treaty and intermediate 32½ per cent. Aime Geoffrion, K.C., for the company, asked for ¾ cents per pound French treaty, intermediate and general tariffs. This, in addition to the present ad valorem duties. Still further they asked more rigid application of the anti-dumping clause. Mr. Geoffrion appeared for the Reg. N. Boxer Co., Ltd., Toronto; Stauntons Ltd., Toronto; Colin McArthur & Co., Inc., and Watson Foster Co., Ltd., Montreal. These companies are subsidiaries of Canadian Wall Paper Manufacturers, Ltd. The firm has a present capital of $2,647,600 stock and $567,000 gold bonds. A substantial portion of the money invested is English capital, which Mr. Geoffrion claimed was invested in the expectation of the continuance of "proper and reasonable tariff protection." The English owners were Wallpaper Manufacturers Ltd., of London, which had sixteen subsidiaries over there. There were only four or five independent companies in England and a small one in Montreal, the Mount Royal Wallpaper Co., counsel stated. Canada Wallpaper Manufacturers, Ltd., controlled about 99 per cent of the Canadian production. Their plants produced 24,000,000 rolls of wallpaper annually, worth $3,000,000. They had 600 employees receiving wages of $77,000. The directors of the Canadian company were all Canadians with the exception of one English director. The McArthur plant in Montreal had been closed down but all the others were active.

Notes and Jottings of the Trade

John H. Taylor, who is now engaged in farming near Toronto recently celebrated his golden wedding when the fact was recalled that fifty years ago Mr. Taylor was manufacturing news print in the Don Valley Paper Mills in Toronto—a plant still being operated by N. E. Wainwright.

Frank W. Day and Norman T. Nixon, of Toronto, have joined the sales staff of Paper Sales, Ltd., King street West, Toronto.

Production of talc and soapstone in Canada during 1928 was valued at $219,358, according to finally revised figures just issued by the mining, metallurgical and chemical branch of the Dominion Bureau of Statistics at Ottawa. In 1927 shipments amounted to 161,521 tons valued at $236,105. Quebec shipments were made from quarries in the Eastern Townships and consisted chiefly of soapstone blocks for use in lining the alkali recovery furnaces of sulphate pulp mills. Ontario's production was wholly of talc obtained from deposits near Madoc, Hastings County.

With concrete for first floor being poured in the erection of the $57,000 addition to the plant of the Canadian Paperboard Company, Ltd., Commissioners street, Toronto, a number of sub-contracts have been let by Stevens Engineering and Supplies, who hold the general trades contract. Good progress is being made with the building.

Several Toronto paper houses are interested to a small extent in the liquidation of the Tower Printing and Publishing Company, Inkerman street, Toronto, which has just failed. The Watch Tower Company, in New York, are the heaviest creditors.

Among the exhibits featured at the dairy show held at the Coliseum in Toronto consonant with the convention at the Royal York Hotel in that city, was one by the Sealright Company, of Peterboro, Ont., which had a display of carton paper and paper caps for bottles.

L. R. Wilson, general manager and vice-president of the Abitibi Power and Paper Company, Ltd., was a business visitor in Toronto this week.

Bulk contract for the erection of a $14,000 generator building and shed for Dominion Boxboards, Ltd., on the Toronto waterfront has been awarded to the Toms Construction Company, Fleet street, that city. Work is scheduled to start shortly.

The Toronto office of the Howard Smith Paper Mills already has a couple of enthusiastic fliers in the persons of Messrs. French and Powter and it is likely that before long a third member of the staff, in the person of Miss Beatrice Shadlock, will be doing solo flights. Miss Shadlock took her first flight in a Moth plane at the Toronto Flying Club's airport the other day and later announced her intention of taking up flying seriously. She will be one of several women fliers in the Toronto Flying Club.

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Pennsylvania Mills Report Active Demand

Fine Paper Are in Specially Satisfactory Demand and Wrapping Paper Are Fairly Active—Buyers Show Same Tendency to Be Cautious Since the Recent Slump in the Stock Market But This Hesitancy Is Expected To Pass Rapidly as the Stability of Business is Appreciated

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., November 4, 1929.—Quite a decided improvement is evident in the Quaker City paper market as the majority of dealers report the best demand for paper generally that has existed within recent times. This optimistic outlook cannot be construed as a boom in business as there still is lacking the normal volume of orders in certain grades that ordinarily is in progress at this season. The fine paper market was particularly promising as dealers gave accounts of business prior to the stock market debacle as showing the brightest attitude on the part of purchasers of grades that are consumed in volume.

Stock Market Debacle On Future Paper Orders

While there was a good account of business among the paper distributors in the home offices of the larger paper houses the travelers on the road who made the rounds of their outlying territory shortly after the big slump in the stock market were unpleasantly confronted with a sense of caution on the part of paper consumers who are prone to await more definite trend of industry after the general effect of the market's break is known or shown in future business. While paper merchants do not believe that the slump will permanently affect business they are confronted with that attitude on the part of their customers despite the present optimistic outlook in the paper industry. It may be that this attitude will soon be dispelled as the holidays are bound to bring a certain amount of activity in the business world despite the heavy losses which the public must bear in the record breaking losses on the Exchanges. Paper dealers state that there has been little accomplished by their road representatives since the stock market's break and so will await returning confidence before making further sales efforts.

Fine Paper Business On Upward Trend

The most satisfied dealers are those who feature fine papers. This branch of the industry was on the road to the broadest expansion in business when the slump in the market came and until last week continued to enjoy a good volume of orders both in wholesale and retail quantities. Wholesalers of book papers are highly elated over the excellent demands that have been noted in the past ten days and state that publishers and larger printers are buying freely as their business warrants. All grades of unfinished book papers are in the active list while coated lines are fairly bought. There has been a broad market for cover papers and announcements as the holidays approach while the belated demands for greeting card stocks keep up the seasonal markets for card stocks. Writing papers of the better sort are active but not as lively as they were a month ago.

Wrapping Papers Move

Though the demands for wrapping papers and other coarse grades holds fairly well there has been a tendency to lessened buying since the stock market slump. This condition, however, is believed to be temporary. Specialties for the holidays continue to move in good volume. There is a growing volume of orders for gummed tapes, holiday wrappings, corrugated products, fiber shipping containers, bags and allied lines for the garment trades as the Christmas demands are anticipated. Building papers are firm and more active as the season advances and winter time needs are bought in the roofing stocks, felts and boards for weather proofing are ordered.

Fine paper manufacturers who operate the larger mills are operating at full capacity while the smaller producers are on from 75 to 80 per cent of schedule. Board mills continue to hold to the fall schedule but are not sold far ahead. The larger fine paper mills with growing business in such unfinished grades as now are being bought heavily are sold from 3 to 4 weeks ahead. Prices are firm. The book paper quotations which last spring time were subjected to heavy inroads on values now are firmer and back to normal prices that make business profitable.

Paper Stock Quieter

Though mills are active and operating on better schedule than for many months the paper stock market does not show the improvement as business lags along with spotty demands of certain grades that are scarce and cannot be secured in any volume. Better grades, of course, are active as there are less accumulations of them. Mills buy only in hand to mouth supplies.

Paper and Twine Merchants Meet

With a problem that needs the timely advice of an experienced and capable adviser looming in the paper industry as a whole and in the wrapping paper division particularly, the informal talk given to the members of the Philadelphia Paper and Cordage Association by T. H. B. Smythe, of the J. L. N. Smythe Company, proved to be a most interesting and welcomed event at the meeting of that organization held last Friday at the Adelphia Hotel. As the problem of small lot buying is the ruling factor among paper distributors today there is need for a frank discussion of the matter with regard to profits and loss and the adjustment of the manufacturer, dealers and customer to the type of trading that has prevailed in the post war years. While dealers complain about the loss entailed in this trade condition there is effort to correct impairment of profits by the various organizations by timely advice and cooperative interchange of ideas on how to meet the situation. So, at the luncheon hour, the full quota of membership of the Paper and Cordage Association met at the Adelphia Hotel to greet the speaker on this important topic and were highly gratified with the practical advice given by Mr. Smythe, who is well versed in the matter as a member of one of the oldest of Quaker City wrapping papers and specialty houses and whose opinions are soundly respected as is the young paper merchant himself. His topic was built up around the relationship between jobber and manufacturer and jobber and paper consumer. He recommended to the dealers the checking up of all small orders that are in reality retail buying taken at wholesale values. This checking up on the cost of handling the small order was for the purpose of adjusting prices to meet the conditions in overhead which must entail the dealing in this class of paper traffic on a profitable basis. He told his audience that the small lot business was just as much a problem to the manufacturer as it was to the dealers and that fair consideration must be given the mills who are often called upon to meet hurried retail ordering by small consumers without due thought to the cost entailed in such business by the producer who is called upon to meet such emergencies without clarification of the problem to be encountered by belated small lot requirements of the consumers who needlessly delay purchases and so shift the overhead cost to the manufacturer and to the distributor and still expect them to give values that are not on a parity with the work involved in handling his class of orders. He urged the paper men to consider the manufacturers' problems and the consumers' attitude, stating that the selling and buying situation needed clarifica-

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tion as it was not profitable or satisfactory under present conditions. He touched upon the National Paper Trade Association cost system, urging the dealers to look into its plan and so find a way for improved profits and business methods. He briefly reviewed some of the problems taken up by the National Convention held earlier in October and complimented the national organization on the results obtained by cooperative methods. Mr. Smythe was wrapping paper division delegate to the National Convention from the Philadelphia Paper Trade Association. He urged the paper merchants to look into the "Net Profit Control" booklet issued by the National Association as a timely feature for solving the small lot problem.

Frederic S. Balch, treasurer of the Paper and Cordage Association, reported the organization as "in healthy condition." The Joseph Parker & Son Company, blotting paper manufacturers, New Haven, Conn., were admitted to membership at the meeting. The firm, the oldest blotting paper manufacturers in America, is represented here by Louis McGreen. At the next meeting to be held November 15, there will be nomination of officers to be elected at the December session.

Allentown Paper House Opened

The new house that has been added to the firm of S. Walter, Inc., and known as the Lehigh Valley Paper House Division of S. Walter, Inc., was opened in Allentown, Pa., on November 1. Simon Walter, head of the Philadelphia firm of S. Walter, Inc., accompanied by G. Edward Barnes, secretary of the Philadelphia Paper Trade Association and of the Walters company, and B. R. Moore, manager of the Andrews Paper House Division of S. Walter, Inc., located in York, Pa., attended the opening of the new fine paper concern in the Up-State trade. The new concern and branch of the local wrapping paper and specialty concern will feature exclusively fine papers in that section, taking in the entire Lehigh Valley and with daily service to points within a radius of 50 miles of Allentown. The business was opened in Hummel Warehouse along the Lehigh Valley R. R. The grades of paper made by leading fine paper manufacturers will be carried, including those of the Hammermill, Strathmore, Missisquoi and Wheelwright paper companies and the firm's own Lehigh Valley bonds.

To Give Technical Training

By special arrangements with T. L. Crossley, of the Institute of Industrial Arts at Gardenvale, Quebec, who visited the Philadelphia plant of the Container Corporation of America last week there will be enrolled in the classes of that institution 17 men associated with the local mill of the corporation. These men from the Manayunk mills will receive instructions as students in the Pulp and Paper Making Course of the Institute sponsored by the joint committee of the American and Canadian Pulp and Paper Association. These 17 students will be given instructions by mail and were selected by Mr. Crossley upon his visit here last week. The mill management welcome this movement and agreed to refund the expenses of the course to the men who graduate with a mark of 90 or better. This progressive step in education along technical lines was given the support of the mill manager, H. L. Joachim, who recently was promoted to the general management of the mills and plant of the Philadelphia Division of the Container Corporation of America.

Shryock Bros. Operate Full Schedule

Following the innovations that have been made in the binder board mills of Shryock Brothers in Downingtown, Pa., the plant is again on full time operation and sold well ahead on orders for the high grade boards manufactured by the company. The headquarters of the firm are located in this city at 924 Cherry street where S. S. Shryock of the firm reported that there has been such a heavy demand for the binder boards made by the firm that full capacity operation is again in force after several weeks of night work catching up on production needed to take care of growing business. The improvements to the mills consist in the installation of a 2,000 pound mixer made by the Downingtown Manufacturing Company and the erection of a 170 foot stack. Within recent weeks the mills have been subjected to several other improvements in minor equipment and to the modernizing of the machinery units.

Changes New York Representative

Allen F. Horton, who until recently was associated with the Philadelphia headquarters of the W. C. Hamilton & Son, with mills at Miquon, has been assigned to represent the manufacturers of fine papers in the New York offices at 261 Broadway. He will succeed Spencer J. Blake in the Metropolitan territory after considerable experience on the sales staff in the Quaker City district.

Thomas M. Royal & Company at Coffee Convention

There will be on exhibition at the annual convention of the National Coffee Roasters Association to be held in New Orleans, La., this week the complete and extensive line of coffee bags made by Thomas M. Royal & Co., 7th and Grange streets, one of the largest bag manufacturers in the nation. The Coffee Roasters convention will be held throughout the current week in the Roosevelt Hotel, where Thomas M. Royal, head of the firm, and Vice President Gordon H. Friend will be in personal attendance. Extension is being made of the plant equipment of the bag plant which is well sold ahead on all its bags, and particularly on its own line of patented cellophane face bags that have been gaining rapid distribution in the trade within recent months. There will be added several new units in bag machines, printing equipment and other equipment to take care of this growing demand. The firm produces, besides a general line of bags, coffee bags, cellophane face bags and specially made bags that are adapted for railroad transportation under the rulings required by the Interstate Commerce Commission as protection against leakage and for the shipping of bulky products and those likely to seepage.

Whiting Patterson Co. Issues New Samples

The Whiting Patterson Company, 320 N. 13th street, is issuing a new sample book on its own make of bonds. The new sampler contains all the sizes and colors of Cairo, Calcutta, Brussel and Dresden Bonds, the firm's own marks.

New Turbine for West Vaco Mills

There is being installed in the mill of the West Virginia Pulp and Paper Company at Tyrone, Pa., a new turbine engine which is being erected by the Westinghouse Electric and Manufacturing Company. The new steam turbine is now in course of construction and is being supervised by executives of the Philadelphia branch of the Westinghouse Company. Other innovations in the Tyrone mills are under consideration in the way of electrification of the power units.

Jaite Bag Co. Adds New Machine

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., November 1, 1929.—The Jaite Bag Company which operates a mill at St. Helens, Ore., has ordered a new machine which will greatly increase the bag output of the plant when installed. The machine will make the bags, and print, sew and count them in one continuous operation.

The machine is 78 feet long and has a capacity of 80,000 cement bags a day. Increase in the bag plant will call for an increase in the paper mill which furnishes the kraft paper for the bag manufacture, and the company is now having built two additional units in preparation for such increase.

H. Jaite of Jaite, Ohio, is in the West in connection with the expansion program. He states that if business continues to increase they will not only enlarge the buildings but will augment the working force with an additional 80 to 100 operatives. The company now employs about 100 men and women.

MANITOWOC DIGESTER LOADED FOR SHIPMENT

This Company has been actuated by one undeviating incentive in designing and building Paper Mill Equipment: To design and build as finely as can be done; to spare no time — no care; to eliminate the element of chance from even the smallest part; to know that Manitowoc Paper Mill Equipment is as nearly perfect as is humanly possible.
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MANITOWOC ENGINEERING WORKS
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Rules of Practice for Waxed Paper Industry

As Result of Second Trade Practice Conference Held in Washington Fourteen Previously Adopted Rules Are Confirmed and One Additional Rule Is Adopted—About Eighty Percent of the Industry, Based on Volume, Were Present or Were Represented at the Conference

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., November 6, 1929.—The Federal Trade Commission announces its action on fifteen rules of business practice adopted by the waxed paper industry at its second trade practice conference held last June in Washington.

The first trade practice conference was held a year previous in Washington. Fourteen rules were adopted but later practical experience in the industry raised questions as to operation of the rules and a second conference was called for considering such revisions as might be necessary.

After due consideration the industry decided there was no sufficient reason for revising the previously adopted rules and these were confirmed.

One additional rule was adopted, and designated by the commission a Group II rule. It is as follows:

The sale of waxed paper, in violation of any of the rules adopted by the industry under auspices of the Federal Trade Commission, under the subterfuge that the seller is required to do so by a contract antedating the adoption of said rules, when in fact no valid and enforceable contract or agreement antedating the adoption of the rules exists, results in fraud and discrimination between purchasers, and is condemned by the industry.

Among practices covered by the Group I rules are breach of contract, imitation of trade marks, defamation of a competitor, use of inferior materials, accepting orders in large quantities, but shipping in small quantities, deviation from standards, and selling below cost.

The original Group II rules apply to such subjects as standard form of contract, furnishing etchings and plates without direct charge based on actual cost, quotation of uniform prices by a manufacturer regardless of ink coverage, and sales f. o. b.

A complete report of the trade practice conference may be seen in the commission's official letter to the trade which is as follows:

Statement by the Commission

A second trade practice conference for the waxed paper industry was held in the United States Chamber of Commerce Building, Washington, D. C., on June 13, 1929. Commissioner Charles H. March presided, assisted by George McCorkle, Assistant Director, Trade Practice Conferences.

The first trade practice conference for this industry was held at Washington, D. C., on June 7, 1928, and it seemed that practical experience in the industry raised some questions as to misunderstanding concerning the operation of the rules adopted. This suggested the desirability of fuller discussion and consideration of the question of revising or adopting additional rules. The purpose of the second conference, therefore, was to present and discuss the reasons for any such revisions which might be deemed essential. After full discussion and consideration the industry decided that there was no occasion for revising the rules previously adopted and these were confirmed. An additional resolution (appearing herein as Rule 15) however, was adopted, which it was thought would remove any further objection to the complete and successful working of the rules.

After the conference was called to order and those present had registered, Commissioner March stated in part that the trade practice conference work had resulted in material benefit to those particular industries for which such conferences had been held, and that it was not the purpose of the Federal Trade Commission to in any way interfere with the legitimate conduct of business, but on the other hand it was one of the prime purposes of the Federal Trade Commission to help business in every way possible to experience a material growth while at the same time make material progress in raising the standard of business conduct.

It was estimated that between seventy and eighty per cent of the industry, based on volume, were present or represented at the conference.

Paul S. Hanway, secretary of the American Waxed Paper Association, New York City, was unanimously elected Secretary of the Conference.

The rules, as here announced, become the rules of business conduct on the subjects covered. Those appearing in Group I are regarded by the Commission as condemning unfair methods of competition in violation of law, and are affirmatively approved. Those appearing in Group II are accepted as expressions of the trade.

Group I

RULE 1 (formerly resolution 2).

Inducing or attempting to induce the breach of a contract between a competitor and his customer during the term of such contract, is an unfair method of competition.

Note: Whenever notice of the existence of a contract is brought to the attention of any person in any way, he shall promptly discontinue all efforts which might induce a contracting party to break such contract.

RULE 2 (formerly resolution 5).

The imitation of the trade-mark or trade-name of a competitor results in the deception of buyers and consumers, is an invasion of the property rights of such competitor, and is an unfair trade practice.

RULE 3 (formerly resolution 6).

Interference with a competitor's business through the enticement of employes from his employment is an unfair trade practice.

RULE 4 (formerly resolution 7).

The defamation of a competitor by words or acts imputing to him dishonorable conduct, inability to perform contracts, or questionable credit standing, or the false disparagement of the grade or quality of his goods, is unfair grade practice.

RULE 5 (formerly resolution 8).

The circularization of threats of suit for infringement of patent or trademark among customers of a competitor, not made in good faith and for the purpose of harassing and intimidating customers is an unfair trade practice. The owner of a patent or trademark should, in fairness, deal directly with the alleged original infringer rather than attempt to intimidate his customers.

RULE 6 (formerly resolution 11).

The use of wax which is not fully refined, tasteless, odorless, and of the proper melting point for the purpose for which used, or the use of any inferior material which tends to bring waxed paper into disrepute or to defraud the buyer or the public, is an unfair trade practice.

RULE 7 (formerly resolution 12).

The practice of accepting orders in large quantities for manufacture and shipment in small quantities (known as split shipments) at prices which do not provide for the increased cost of manufacture in such small quantities, results in unfair discriminations in price between customers, in practical effect giving quantity prices on small deliveries to favored buyers who are not justified by any reduction in costs to manufacturer because of quantity

production costs for your Coating and Waxing Operations

In these processes are your most practical opportunities to lift your product above competitive papers. The greater smoothness and superior printing finish that characterize papers coated, or waxed with Waldron equipment is readily apparent—and eagerly sought by box makers and converters. Many actual operating advantages also hold down production costs while holding up the quality.

Waldron engineers with a century of experience to draw from have alone succeeded in producing the type of processing machinery that accomplishes the double purpose of attaining the maximum of quality and quantity with accompanying reductions in operating and maintenance costs. It is this two-fold advantage that is opening for progressive manufacturers new avenues to substantially increased sales.

Illustration above is that of Waldron Arched Back Seven Brush Coating Machine—affording all the advantages of the cylinder machine plus sufficient brush capacity for high speeds—in excess of present established inclined bed machine practices.

JOHN WALDRON CORPORATION

Main Office and Works: New Brunswick, N. J.

NEW YORK
122 East 42nd St.

CHICAGO, ILL.
208 W. Washington St.

PORTLAND, ORE.
519 American Bank Bldg.

WALDRON

Paper Converting Machinery

or any difference in grade or quality, and is an unfair trade practice. It is the judgment of this conference that the manufacturer of waxed paper who accepts quantity orders for split shipments should make a differential in price equal to his actual increased costs of manufacture, on each split shipment, in fixing his sales price.

RULE 8 (formerly resolution 1).

Contracts, either written or oral, are business obligations which should be performed in letter and in spirit. The repudiation of contracts by sellers on a rising market, or by buyers on a declining market, is equally reprehensible. Such action shatters confidence, induces violent fluctuations in price, destroys stability in business operations to the consequent injury of the industry as well as the general public, and is an unfair trade practice.

RULE 9 (formerly resolution 4).

Any deviation from the established standards of the industry causes confusion and waste, affords opportunity for discrimination and fraud, and any such deviation, unless the buyer is fully informed of the fact, is an unfair trade practice.

RULE 10 (substituted in lieu of Rule 13, Group II).

Resolved, that the selling of goods below cost for the purpose of injuring a competitor, and with the effect of lessening competition, is an unfair trade practice.

Group II

RULE 11 (formerly resolution 3).

The making of contracts which do not expressly cover specifications, time for delivery, inspection, filing of claims and other items necessary to form a complete, unambiguous contract, often results in price discrimination, induces fraud, breach of contract and constant disputes which create suspicion and ill feeling in the industry, and is an unfair trade practice. It is the judgment of this conference that the industry should adopt, in cooperation with buyers, a standard form of contract which will avoid ambiguity, prevent misunderstanding, and thoroughly protect the rights of both buyers and sellers.

RULE 12 (formerly resolution 9).

Furnishing, without direct charge based on actual cost, of etching and plates, which vary greatly in cost and value, results in unfair, indirect discriminations in price between customers, which are in no sense made on account of differences in grade, quality or quantity, and is an unfair trade practice. It is the judgment of this conference that a manufacturer should not supply etchings or plates either of new or modified designs for less than the actual cost of such work or materials as a separate, direct charge, all etchings and plates to be the property of the buyer and subject to his orders.

RULE 13 (formerly resolution 10).

The quotation of uniform prices by a manufacturer for printed waxed paper regardless of the ink coverage, which varies greatly in cost and value, results in unfair, indirect discriminations in price between customers, which are in no sense made on account of differences in grade, quality or quantity, and is an unfair trade practice.

RULE 14

The practice of making sales on a f.o.b. mill basis has been long established as a custom in the industry. Much confusion has arisen in the industry, causing unfair competition, as a result of members of the industry selling their merchandise on a basis of free delivery in some instances and in others selling the same f.o.b. mill. Such a practice causes price discrimination, results in the granting of discounts on transportation charges upon which the seller himself receives no discount, and destroys the basis upon which competition can fairly and openly function.

RULE 15

The sale of waxed paper, in violation of any of the rules adopted by the industry under the auspices of the Federal Trade Commission, under the subterfuge that the seller is required to do so by a contract antedating the adoption of said rules, when in fact no valid and enforceable contract or agreement antedating the adoption of the rules exists, results in fraud and discrimination between purchasers and is condemned by the industry.

Those Who Registered

The following is a list of those who registered at the conference and the interests they represented.

American Waxed Paper Association—Paul S. Hanway, New York, N. Y.

Central Waxed Paper Company—R. B. Donnelley, Chicago.

Cleveland Waxed Paper Company—Paul S. Hanway, Cleveland, Ohio.

Coated Paper Products Company—R. C. McCaskey, Minerva, Ohio.

Crystal Tissue Company—R. B. Donnelley, Chicago.

Detroit Wax Paper Company—L. O. Turner, Detroit, Mich.

Diem and Wing Paper Company—Paul S. Hanway, Cincinnati, Ohio.

Dixie Wax Paper Company—Stuart Moore, Dallas, Texas.

General Waxed Paper Company—Arthur Havemeyer, Thompsonville, Conn.

Hamersley Manufacturing Company—Geo. W. Hamersley, Garfield, N. J.

Henle Wax Paper Manufacturing Company, Inc.—Sidney Jacobson, New York, N. Y.

Kalamazoo Vegetable Parchment Company—Ralph A. Hayward, Kalamazoo, Mich.

Menasha Products Company—Geo. H. Gardner, Chicago.

Nashua Gummed and Coated Paper Company—Winthrop L. Carter, Nashua, N. H.

National Wax and Paper Manufacturing Company—L. J. Fisher, New York, N. Y.

Newark Paraffine and Parchment Paper Company—Wm. J. Eisner and L. J. Eisner, Newark, N. J.

Ohio Wax Paper Company—Edward Palmer, Columbus, Ohio.

Otsego Waxed Paper Company—Karl R. Zimmer, Otsego, Mich.

Pacific Paper Products Co.—Ralph A. Hayward, Tacoma, Wash.

Package Paper Company—Arthur Havemeyer, Springfield, Mass.

Paterson Parchment Paper Company—F. M. Storr, Passaic, N. J.

Saniwax Paper Company—Frank D. Bullard, Kalamazoo, Mich.

Shawmut Waxed Paper Company—Paul S. Hanway, Holliston, Mass.

H. P. Smith Paper Company—Geo. H. Gardner, Chicago, Ill.

Warren Manufacturing Company—L. J. Eisner, New York, N. Y.

Waxed Products Company—Paul S. Hanway, Brooklyn, N. Y.

Waterproof Paper and Board Company—C. R. Wright, Cincinnati, Ohio.

Waxide Paper Company—Maurice Berkley, Kansas City, Mo.

Wax Paper Products, Inc.—Gordon Trist Burke, Omaha, Neb.

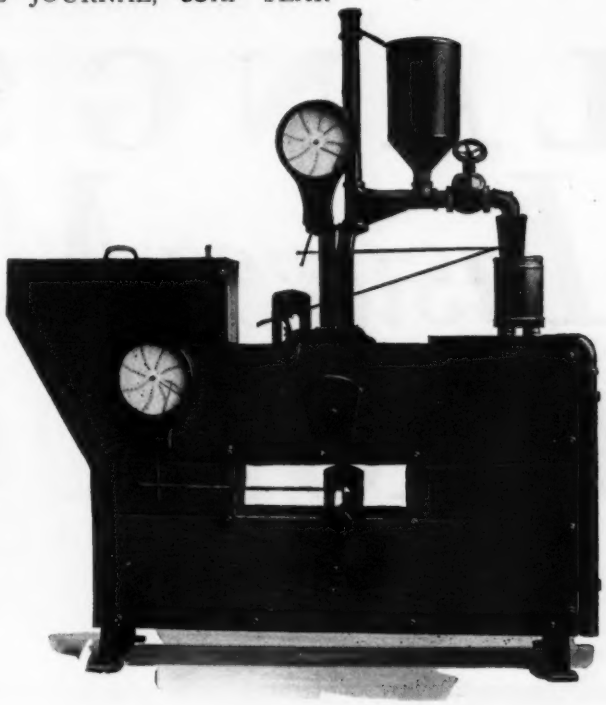
Davies, Jones & Beebe—R. N. Beebe, Washington, D. C.

George Chahoon Heads J. & J. Rogers Co.

[FROM OUR REGULAR CORRESPONDENT]

AUSABLE FORKS, N. Y., November 2, 1929.—George Chahoon was elected president of the J. & J. Rogers Company at a meeting held by the stockholders to name a successor to the late James Rogers, who died recently. Mr. Chahoon has been identified with the firm his entire life and is one of the founders. Other officers elected at the meeting included I. H. Chahoon and Henry G. Rogers as vice presidents; treasurer, E. D. Cameron; secretary and general manager, F. L. Kemp. Henry C. Rogers was elected a director to take the place of his father. Announcement was also made of the appointment of Robert Caldwell as superintendent of the paper mill while James Rogers will have supervision of the sulphite mill.

A Uniform Sheet requires Uniform Stock Consistency



IT'S an A B C principle in paper making that in order to turn out a uniform sheet, you must have *uniform* consistency of stock.

And that is why such a machine as the DeZurik Regulator was designed and perfected.

All stock passes through the Regulator before going to the machine head box. If the density exceeds the desired point of consistency for which the Regulator is set, the proper amount of water is automatically added. No power is required.

Two Bristol Recorders keep an accurate account of the day's run—one showing consistency entering the Regulator and the other, leaving. Dumping of heavy or light beaters or chests shows up instantly on the chart.

When you consider the small investment this machine involves—and the important function it performs in producing a more uniform sheet—it is easy to realize why you cannot afford to "get along without it."

Your inquiry, addressed to the Valley Iron Works Co., Appleton, Wisconsin, will bring you any information you desire.

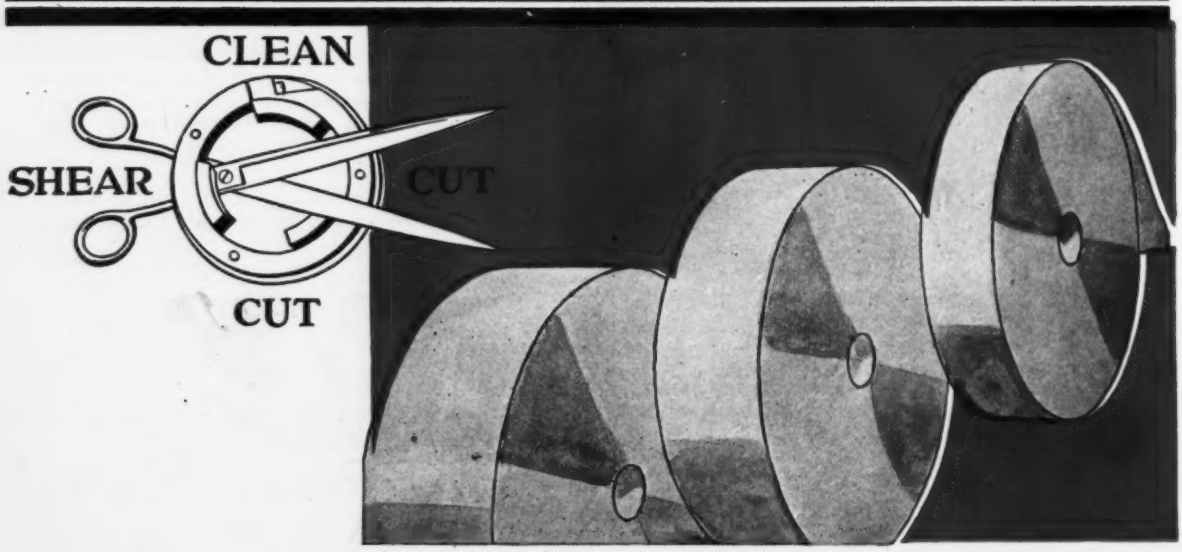
VALLEY

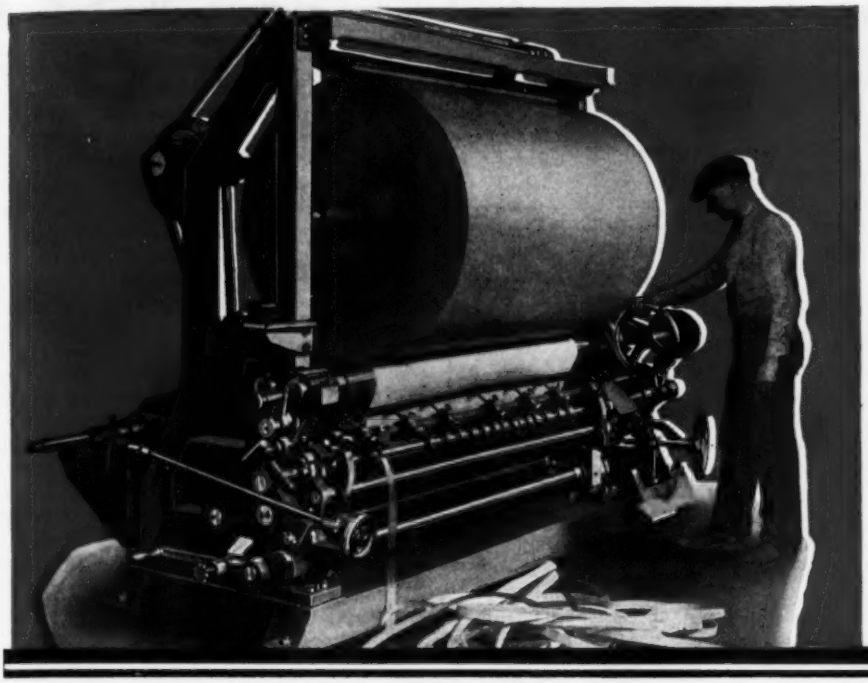
Equipment for Paper and Pulp Mills

New York Office: 350 Madison Ave.
Pulp & Paper Mill Accessories, Ltd., Montreal, Canada, Canadian Representatives

LANGSTON *Insures Maximum* PRODUCTION

SPECIALIZING in heavy commercial crepe papers, the Angier Corporation, Framingham, Mass., have had excellent results with a Type AA Langston Slitter and Winder. The Langston Shear-Cut has proved superior to other methods of cutting specialty papers of the crepe type, according to Mr. W. N. Welch, factory manager. The Langston Slitter has proved its economy for both long and short runs. On two nine-hour runs (Grizzly Bear 88-lb. paper) production was at the rate of 1250 pounds per hour. Runs of as little as 16 pounds were also handled effectively. You get the maximum production out of Langston equipment *because of the maximum efficiency we build into it.* Sturdy, rugged construction,





smooth, speedy and balanced design, the famous Shear-Cut and two-drum winding principles, centralized force-feed lubrication, chrome nickel, heat-treated steel gears —these are a few of the Langston features which insure maximum, high-quality production. And these features, plus unusually low repair and maintenance costs, are putting more and more Langston Slitters into mills where economical operation is more important than imaginary economies in equipment purchase. A catalog is yours for the asking.

SAMUEL M. LANGSTON COMPANY, CAMDEN, NEW JERSEY

LANGSTON SLITTERS

New York Trade Jottings

L. J. Dorenfeldt, consulting engineer, Oslo, Norway, has just returned to New York after visiting the Pacific Coast.

* * *

Paul S. Hanway, secretary of the Wax Paper Manufacturers Association, has just returned from a meeting in Chicago.

* * *

J. R. S. McLernon, vice-president, Acer, McLernon & Co., Ltd., Canada Cement Bldg., Montreal, was among the trade visitors in New York during the week.

* * *

Herbert Thwait, the new secretary of the Tissue Paper Manufacturers Association, has offices with the American Pulp and Paper Association at 18 East 41st street, New York City.

* * *

Ossian Anderson, president of the Puget Sound Pulp & Timber Company, of Bellingham, Wash., was a visitor at the office of the Technical Association of the Pulp and Paper Industry.

* * *

John F. Ohlson, who has been the TAPPI American-Scandinavian fellow at Holmans Bruk A/B, Hallstavik, Sweden, has returned to New York after traveling extensively in the pulp and paper making centers of Europe.

* * *

The Treasury Department has announced the allowance of drawback on gypsum, board, gypsum lath, and fiber wall board manufactured by the Certain-teed Products Corporation of New York City at its factories at Tonawanda and Akron, N. Y., with the use of imported pulp board.

* * *

A press dispatch from Washington in the *New York Times* Wednesday morning said "By a vote of 40 to 35, the Senate rejected a Finance Committee plan to raise to $2.50 the existing rate of $1.50 a ton on china clay or kaolin. A moment later, by viva voce vote, Senator Fletcher of Florida was beaten in an attempt to make the duty $3.75."

* * *

William La Varre was permitted to proceed in Federal Court, Eastern District of South Carolina, with his $2,500,000 suit against the International Paper Company and International Paper and Power Company by a ruling on Tuesday of this week of Federal Judge J. Lyles Glenn. The ruling, made verbally in open court, was on a motion by counsel for the International Paper Company and the International Paper and Power Company for dismissal of the summons and to dissolve attachments made by the plaintiff. La Varre, who operates, with Harold Hall, newspapers in South Carolina and Georgia which were purchased with funds advanced by the paper and power company, is suing for damages he claims were caused by failure to live up to an agreement.

* * *

The regular weekly luncheon of the New York Salesmens Division of the American Paper and Pulp Association was held on Monday, November fourth, at the Canadian Club. An interesting discussion of trucking problems as applied to paper transportation, both local and long distance, was given by G. H. Pride, president of the Pride Transportation Company of Brooklyn. The speaker emphasized several important factors in the promotion of economical long distance trucking, such as cooperation between the purchasing and sales departments of paper mills, so that raw material may come into the plant and finished products move out on the same truck. Phases of trucking problems in New York City which add to its well known traffic congestion were also lucidly explained by Mr. Pride, and suggestions were made for ways and means by which the paper company shipper could co-operate to overcome some of these causes, and so reduce charges and expedite deliveries.

Second Brotherhood Election May Be Held

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., November 2, 1929.—Indications are that a second ballot will be necessary in the fight for the presidency of the International Brotherhood of Papermakers and the contest, featured by bitter personal issues, gives promise of being the closest and hardest fought in the history of the organization. Jeremiah T. Carey, former president, and Matthew Burns, former secretary, are opposed to William R. Smith, present holder of the office, claiming that Mr. Smith has used his authority and influence for personal benefit, not in a sense of dishonesty of a technical nature but that he has endeavored to perpetuate unfairly his tenure of office. They also contend that his administration has not been successful.

Mr. Smith on the other hand defends his policy as the best possible under the circumstances and conditions of the trade. Feeling is running high and Mr. Carey has endeavored to have various votes for his opponents voided, basing his demand on a charge of illegal balloting. It was Mr. Carey who, when defeated in 1923, after seventeen years as president, secured an injunction against the organization claiming votes in his favor had been thrown out. The Supreme Court decided against him at that time. Indications point toward Mr. Burns having a commanding lead over both his opponents on the present canvass but the combined vote of Mr. Smith and Mr. Carey may prevent him from obtaining the necessary majority of all ballots cast. There is no indication at this time which of the latter will oppose Mr. Burns on the second ballot but there is a feeling locally that it will be the present incumbent.

Several efforts have been made by Mr. Carey to have the canvass of the local unions where Mr. Burns received overwhelmingly large majorities thrown out on the ground of errors and wrong practices in the balloting but the international canvassing board has not passed upon these protests and no definite statement can be obtained as to what their decision will be. In the case of a second ballot which seems inevitable it may be late in December before the election is completed and the new president selected. Present indications are that the count of votes will not be over before the early part of November as votes are still coming in from outlying points in Canada and Newfoundland.

John H. Noonan, of Glens Falls, who is seeking the office of treasurer, is taking no chances that even so much as a single ballot over which there is any question may be diverted to his opponent, Archie Hook, of Chicago. Mr. Noonan has been in Albany for several days and plans to remain in this city until after the board of canvassers has announced the result of the election. According to unofficial information both candidates are running a neck and neck race for the position. It was learned that the board of canvassers have completed a little more than one-third of the count and up to the present time only a comparatively few ballots have been thrown out owing to the fact that the voter was not in good standing or some similar reason.

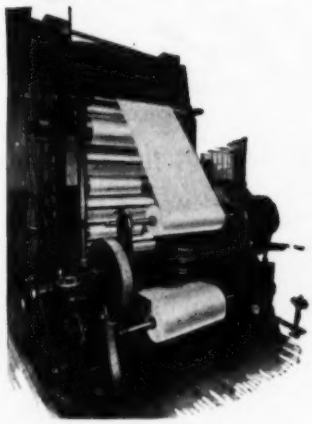
Acquires Consumers Boxboard Co.

SPRINGFIELD, Mass., November 4, 1929.—The United States Envelope Company has acquired the property of the Consumers Boxboard and Paper Company, located at Lititz, Pa. This mill makes tissue paper and its product will be used in connection with the company's present converting plant, known as the Morgan Tissue Paper Company Division.

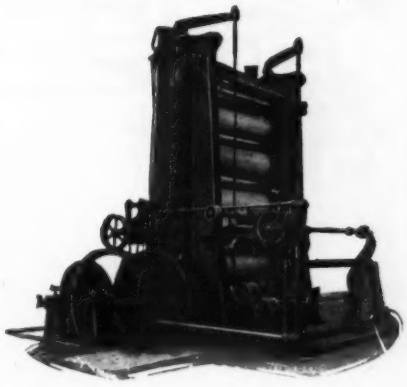
Mr. Robert J. Black, the manager of the Morgan Tissue Paper Company Division of the United States Envelope Company, in Springfield, will continue the management of this plant and will also have the management of the paper mill beginning November 1, 1929.

The paper mill as well as the converting plant will be known as the Morgan Paper Company Division of the United States Envelope Company, Lititz, Pa.

About refilling your calender rolls



Finest cotton, especially selected for the purpose, is used in cotton rolls refilled by Butterworth. This means that Butterworth refilled rolls give you the same long life and extra hours of service so characteristic of new Butterworth rolls.



Dill and Collins, Philadelphia, like Butterworth Rolls Here they are — the entire stack Butterworth Cotton Rolls.

The entire stack of Butterworth Rolls in a Norwood Calender.

Refilled rolls must pass the same series of rigid tests to which new Butterworth rolls are subjected before they leave the Butterworth plant. Next time, let Butterworth refill your calender rolls.

For coated stock, made of finest cotton, especially selected for the purpose.

For glassine, where they regularly give 1500 hours and more; also for super, where they give hours and hours of extra service.

H. W. Butterworth & Sons Co.,

Established 1820

PHILADELPHIA, PA.

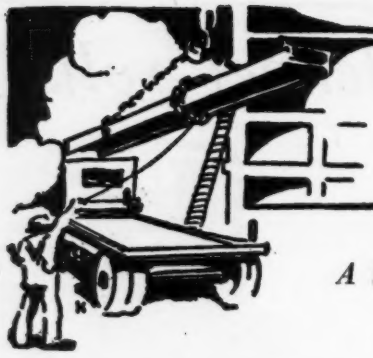
Plants at Philadelphia and Bethayres, Pa.

NEW ENGLAND OFFICE:
Turk's Head Bldg., Providence, R. I.

SOUTHERN OFFICE:
Johnstown Bldg., Charlotte, N. C.

IN CANADA:
W. J. Westaway, Hamilton, Ont.

BUTTERWORTH *Calender* ROLLS



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Cleveland, Ohio—The Cleveland Wax Paper Company, 2217 Scranton Road, has completed plans and awarded general contract to the Sam W. Emerson Company, 1836 Euclid avenue, for a new addition to its mill for increased capacity. It will be one-story, reported to cost close to $50,000, with equipment. F. A. Sarstedt is president.

Trenton, N. J.—The Stacy Paper Box Company, Ewing and Ogden streets, has concluded negotiations for lease of Building No. 1, of an industrial group of structures at Mulberry street and New York avenue, owned by the Trent Corporation, and will occupy for a new plant. The company will make alterations and improvements and install equipment at once. It is understood that the present factory will be removed to the new location, and considerable increase in capacity arranged.

Mount Holly Springs, Pa.—Curtis & Brothers Co., Newark, Del., manufacturer of paper goods, has concluded arrangements through its president, Herbert W. Mason, for the purchase of the mill of the Mount Holly Paper Company, Mount Holly Springs, and will take immediate possession. The purchasing company will modernize and improve the present plant, installing new machinery where required, and will develop the property for the production of high grade book papers. The expansion and betterment program is reported to cost in excess of $50,000.

Sherman Tex.—The Day Manufacturing Company, Sherman, manufacturer of paper boxes and containers, has arranged for a lease of a new building to be erected by local interests at West Jones and South Crockett streets, to be one-story, 65x145 feet, reported to cost more than $30,000, with equipment. The structure is scheduled to be ready for service by December 15. Clyce & Rolfe, Sherman, are architects, in charge.

Philadelphia, Pa.—Fire, October 26, damaged a portion of the three-story plant of the Southwark Paper Box Manufacturing Company, 2412-24 South Sixth street. An official estimate of loss has not been announced. It is understood that rebuilding will be placed in progress at once.

Fargo, N. D.—The Fargo Paper Company, Fargo, has plans in preparation for a new two-story building, designed for storage and distributing service, reported to cost about $45,000, with equipment. A portion of the unit will be used for office service. W. F. Kurke, 54 Broadway, Fargo, is architect, in charge.

St. Helens, Ore.—The Fir-Tex Insulating Board Company, Pacific Building, Portland, Ore., has awarded a general contract to the J. F. Shea Company, Henry Building, Portland, for the erection of the initial unit of its proposed new mill at St. Helens, for the manufacture of insulating board products, reported to cost close to $2,000,000, with machinery. The Truscon Steel Company, Portland, has secured a contract to furnish structural steel required for the buildings, which will be of steel and concrete type. It is proposed to begin superstructure at an early date. A. E. Millington is vice-president and general manager.

Shelton, Wash.—The Rainier Pulp and Paper Company is said to be perfecting plans for expansion and improvements at its mill, including new buildings and installation of machinery to increase production from 40,000 to 51,000 tons per day, reported to cost more than $500,000, with equipment. It is understood that work will be placed in progress at an early date. Headquarters of the company are at 534 Battery street, San Francisco, Cal.

Baltimore, Md.—The Guilford Folding Box Company, Eager street and Fallsway, Baltimore, has approved plans for a new plant on the Philadelphia Road, extending from Thirteenth to Fourteenth streets, for which general contract has been awarded to the Consolidated Engineering Company, 20 East Franklin street, Baltimore. The structure will be one-story, 160x205 feet, steel and concrete, and is reported to cost about $185,000, with machinery. It is proposed to concentrate production at the new location, and present plant will be removed to that point as soon as the building is ready, with installation of additional equipment for enlarged output.

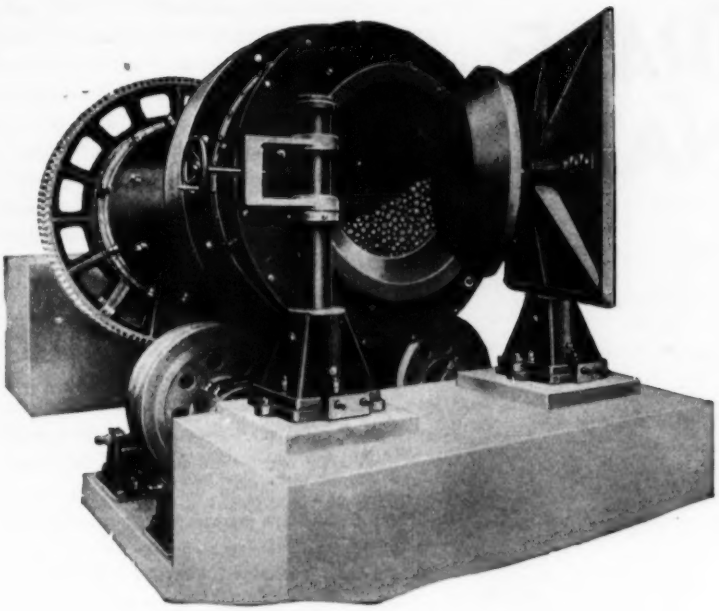
Gardiner, Ore.—The Umpqua Pulp and Paper Company, Gardiner, is beginning preliminary work for its proposed local pulp and paper mill, and will proceed with grading and foundations for initial units. The plant will be equipped for an initial capacity of close to 100 tons per day, and is reported to cost more than $1,000,000, with machinery. Joseph Kaster is president and general manager, in charge.

Oshkosh, Wis.—The Oshkosh Corrugated Box Company, Murdock and Harrison streets, is said to be arranging for early call for bids on general contract for a new two-story addition to mill, recently referred to in these columns, to cost approximately $200,000, with equipment. A list of machinery to be installed has been arranged. E. A. Juul, Security Bank Building, Sheboygan, Wis., is architect, in charge.

Wellsburg, W. Va.—The Pillsbury Flour Mills, Inc., Metropolitan Life Building, Minneapolis, Minn., has approved plans for the immediate construction of a new mill at Yankee and Eighteenth streets, Wellsburg, for the manufacture of paper bags and sacks for flour container service. Raw material will be secured from paper mill now being operated in this section by the company. The new plant will be one-story, reported to cost close to $140,000, with machinery.

Cathlamet, Ore.—The Crown Willamette Paper Company, 248 Battery street, San Francisco, Cal., is reported planning the construction of a mill in the vicinity of Cathlamet for cutting and handling logs too short to raft to lumber mill. Site will be cleared at an early date. The proposed unit will be one-story, reported to cost more than $50,000, with equipment. Company mill, devoted to the manufacture of kraft and other wrapping papers, is located at Camas, Wash., and an expansion program is now in progress at that point to provide for large increase in former capacity.

Newark, N. J.—The J. B. Card & Paper Company, 293 Plane street, has leased two floors and basement in the four-story building at 24-26 Mechanic street, and will occupy at an early date for expansion. The present storage and distributing plant will be removed to the new location during December.



Product is improved—Costs are improved

What the Marcy Open End Rod Mill brings to the paper maker

NO paper manufacturer is going to pass up—at least not without consideration—ways and means of improving his finished product.

But if in addition to improving the product, he can at the same time cut costs, the investment in the "ways and means" is all the sounder.

If asked, several prominent operators would say they use the Marcy *Open End* Rod Mill with excellent results. In one plant, the caliper of the board was made more uniform because the fibers were more uniform and also machine broke was greatly reduced. In another plant, the strength of the paper was materially increased. The formation is better. In all plants using Marcy Rod Mills, per ton costs for beating are very low.

Marcy *Open End* Rod Mills are a sound investment for paper manufacturers.

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PAPER TRADE JOURNAL
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CENSUS OF MANUFACTURES

For the first time the Census of Manufactures to be taken early in 1930 will call for information on the practice of manufacturers with respect to the number of days that constitutes the normal working week of their plants, the Advisory Committee on the Census of Manufactures announces in discussing some of the more important aspects of that phase of the coming census. Specifically, the Advisory Committee points out inquiry will be made as to whether the workers in each plant are on a six-day basis, five and one-half day basis, or on a five-day basis per week. During the past two or three years there has been much speculation on this subject but exact facts of a nation-wide scope have not been available.

The Advisory Committee for the Census of Manufactures constitute one of four groups of business men, economists, statisticians and others named by Secretary of Commerce, R. P. Lamont to cooperate with the Department in drawing up plans and schedules for the census. The other advisory Committees deal with Distribution, Unemployment and Population.

Emphasizing other important phases of Census of Manufacture the committee says, migration of industry will be the subject of another inquiry that will be made for the first time. Movements of manufacturing which have been under way during the last decade have resulted in decreases in the requirements for skilled labor in one section of the country accompanied by increases in requirements for the same type of labor in other parts of the country. Again, a trend of manufacturing away from established centers and from the large cities has been reported by some observers. Such a diffusion of manufacturing would have an influence on the employment conditions surrounding industry. The purpose of this new census inquiry is to obtain new and accurate data on this subject.

Manufacturers will also be asked to give information on the number of shifts per day and the number of hours of labor per week, and the data on these matters will be more extensive than at any census since 1919. In addition there will be the usual questions on the number of wage earners and salaried persons, including monthly figures by which employed; the seasonal variations of employment in the several lines of manufacturing can be measured; and on the growing use of power and power equipment, a subject of interest both to manufacturers and to factory workers. Data on all these matters will give information to everyone interested in industry and industrial development.

The Advisory Committee is now engaged in other phases of its study of the Census of Manufactures. The character of tabulations that will bring out most clearly the significance of the data to be collected is one such matter of special importance.

The suggested schedule which will go out next January to every manufacturer in the country has been drawn up, the Advisory Committee states with one basic thought in mind—that the information resulting from the tabulations will be of real practical value, directly or indirectly, to manufacturers in their studies of production and distribution problems. Data which do not fall under this general heading have been eliminated, and new data of large practical value to manufacturers will be requested for the first time from the manufacturers of the country.

Special efforts will be made next year by the Census Bureau to tabulate the data furnished by the manufacturers in such a way as to point out the most significant industrial trends. Among these trends is that of migration of industry. Large movements of industry have been under way especially since the War. Some of these movements have involved the transfer of thousands of employees from one section of the country to the other, and have entirely changed the industrial occupation of a large portion of the inhabitants of these sections. Such a migration is being witnessed in the textile industry. In other cases there has been a distinct drift by manufacturers away from urban communities, and out into the smaller towns. Again, a tendency toward concentration of certain industries has been prevalent, while other industries have tended to spread throughout the country. All of these trends have a large influence on the employment phases of industry. It is very generally known that such trends are under way, but no definite data are available. The data which will be made available to manufacturers through the coming Census will picture very clearly these trends in industrial migration.

For the first time the forthcoming Census will make available data on the amount of idle power equipment in the manufacturing plants of the country. Estimates have been made that as much as 50 per cent of the installed power in the country practically is idle through, obsolescence, over-capacity, or other causes. Definite data, however, on this very significant subject have never been made available from any source. Power installation is one of the best possible bases for industrial or market studies, but the inaccuracy of the available data due to the inclusion of this large amount of idle power equipment has robbed such studies of much of their potential value.

Special studies of the subsequent tabulations are being made by the Census Bureau officials. Many new and valuable tabulations will be made which can be used as a basis for production and distribution studies on the part of manufacturing organizations.

The Census Bureau is also making special efforts to get the resulting statistics on manufacturing operations back to the manufacturers at as early a date as possible. Realizing that an early report from the manufacturers of the country is dependent very largely on the interest manifested by the manufacturers in making early returns, the Advisory Committee has appointed a Publicity Committee composed of Robert M. Davis, McGraw-Hill

Publishing Company, Chairman; Dr. H. P. Baker now of the Chamber of Commerce of the United States but until recently executive secretary of the American Paper and Pulp Association; and Dr. Roland P. Falkner, National Industrial Conference Board. This committee will bring the Census of Manufactures to the attention of the manufacturing executives in a very positive way in the next few months through the radio, the press, and by addresses before trade organizations.

The PAPER TRADE JOURNAL urges pulp and paper manufacturers to cooperate to the best of their ability with the committee as the results of the census undertaken in this new way cannot fail to disclose much new information that will be valuable to industry in general.

St. Helens Pulp Co. Listed on Exchange

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., November 1, 1929.—St. Helens Pulp and Paper Company's common stock and bonds have been admitted to trading as a listed security according to announcement made by the Portland Stock and Bond Exchange, October 26, the official trading being started October 28.

The St. Helens Pulp and Paper Company was organized in November, 1924, to manufacture sulphate pulp and paper at St. Helens, Ore. The company specializes in the manufacture of high grade kraft pulp and paper, the entire output being contracted for and distributed by the Graham Paper Company of Missouri as sole selling agent.

The company has shown continued increased earnings and is most efficiently and profitably operated. The capital structure consists of $1,000,000 first mortgage sinking fund, 6½ per cent gold bonds of which $75,000 have been redeemed. This issue was marketed in October, 1926, by Blythe, Witter & Co.

This bond issue was followed by 150,000 shares of common stock, par value of $10.00 each, mainly held by Pacific Goast men. The common stock has paid dividends of 2 per cent, the last dividend being paid on October 1, 1929.

As an indication of the prosperous condition of the company it is pointed out that interest was earned 5.8 times, or 2.7 times the interest for sinking fund requirements.

Max Oberdorfer is general manager and president of the company. He received his technical training in the universities of Munich and Stuttgart.

Pacific Logging Institute Discusses Pulp

SEATTLE, Wash., November 1, 1929.—One entire session was given over to discussions on pulp at the four day convention of the Pacific Logging Congress held in Seattle October 23-26 at its twentieth annual meeting, showing the importance which the pulp industry is gaining among logging interests.

This pulp session was featured Thursday afternoon, and included three main topics under the general heading "Utilization." "Relogging and Conservation" was discussed in its various phases by S. A. Stam of the Merrill-Ring Logging Company; K. O. Foss of the International Wood and Sulphite Company; D. S. Denman of the Crown-Willamette Paper Company; Andy LeDoux of the St. Paul & Tacoma Lumber Company.

"Hemlock—Our Big Problem," was discussed by C. A. Hogue of the West Coast Lumbermen's Association; Geo. D. Newbegin of the Cascade Timber Company; A. E. McIntosh of the Clark-Nickerson Lumber Company.

"Pulp and Its Relation to Logging," was the last topic on this program. It included a report on the use of commercial logs by pulp and paper mills; a paper on "Future of Pulp on the Pacific Coast" by C. P. Winslow of the Forest Products Laboratory of Madison, Wis., and "How the Logger May Profit from Development of the Pulp Industry."

Paperboard Industries To Meet Nov. 19

The next meeting of the Paperboard Industries Association and of the Trade Practice Administration, which are the November (Annual) meetings, will be held at the Commodore Hotel, New York City, as per the schedule shown below.

Members of the Paperboard Industries Association are eligible to attend the meetings of the Groups in which they are enrolled, the P. I. A. general meeting, and also the Trade Practice Administration Session.

Members of the Trade Practice Administration are eligible to attend only the Trade Practice Administration Session.

SCHEDULE OF MEETINGS

Meetings in West Ball Room, Commodore Hotel, New York City
Tuesday, November 19, 1929:

Meeting of	Eastern Standard Time
Folding Box Group, Paperboard Industries Association	9:30 A.M.—12:30 Noon
Container Group, Paperboard Industries Association	2:00 P.M.— 4:30 P.M.
Wednesday, November 20, 1929:	
Paperboard Group, Paperboard Industries Association	9:30 A.M., with both morning and afternoon sessions
Thursday, November 21, 1929:	
General Meeting, Paperboard Industries Association	9:30 A.M.—12:30 Noon
General Meeting, Trade Practice Administration	2:00 P.M.— 4:30 P.M.

COMMITTEE MEETINGS, MONDAY, NOVEMBER 18, 1929

Notices will be mailed calling Committee meetings at the Commodore Hotel, New York City, as follows:

Paperboard Industries Association Standing Committees	10:00 A.M., Nov. 18, 1929
Trade Practice Administration Industry Committees	10:00 A.M., Nov. 18, 1929
Trade Practice Administration Board of Directors	
Paperboard Industries Association Executive Committee	2:00 P.M., Nov. 18, 1929

Officers for the coming year will be elected at the November meetings.

Each of the three Groups of the Paperboard Industries Association will elect its group vice-president and representatives of the group to serve on the Executive Committee.

The president for next year will be elected at the General Meeting of the association, Thursday morning, November 21, 1929.

As a special feature pursuant to plan duly approved at the last meeting there will be an informal dinner, attended by members of the association, on the evening of Thursday, November 21, following the business sessions. There will be talks by the retiring and incoming officers, as well as by some of the members.

Arrangements for the dinner are being made by the Special Committee, consisting of H. C. Campbell, T. C. Mitchell and H. H. Stonebarger. Appropriate tokens are to be presented to each of the four past presidents at that time.

Interesting programs have been prepared for the group and general meetings of the Paperboard Industries Association, as well as for the Trade Practice Administration meetings. Plans for next year's activities will be discussed and outlined.

A special feature of the meeting will be reports to be submitted by committees, appointed at the September meeting, which have held special meetings and which have made an earnest effort to improve the general situation in the paperboard, container and folding box industries. These reports are eagerly awaited.

Everything points to the fact that the meetings will be well attended and productive of much general good for the industry as a whole.

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AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Edited by
RONALD G. MACDONALD, Secretary

Estimating Pulp Strength*

By James E. O'Connell[1]

In studying the valuable papers that have been presented on the subject of pulp valuation during the past few years, the difference of opinion is quite evident, as to whether the initial or unbeaten method or one of the other methods shall be finally adopted as the standard strength test.

Because of the many different grades of paper made with as many different degrees of processing and different kinds of equipment used it would seem almost impossible to develop a processing or beaten method that would suit all conditions.

It is, I believe, an accepted fact that the ultimate strength that can be developed from any pulp is dependent on the initial method for all pulps and necessary to adopt it for pulps that are to be used with scarcely any processing.

For the past year we have used the initial method, now held as a tentative standard modified to suit our conditions on both our sulphite and groundwood pulps with excellent results.

Our pulp samples are taken at regular intervals leaving the fine screens, and placed in the sheet machine without any further processing. The reliability of our strength tests are such that the percentage of sulphite to be used in our stock mixture is determined from the results of our figures.

The following is our method in detail. It will be noted that the modifications mentioned are, first: the test sheets are not seasoned in constant humidity but are first made bone dry and then placed between sheets of blotting paper (that are of known moisture content) and put back in the press so that the moisture content of the test sheets when tested is from five to six percent. We have not found that this procedure makes any great difference in our results.

Secondly: the weight of our test sheets are 32 pounds ($24 \times 36 - 500$). We have found this point a very important factor especially when testing groundwood pulp, so for our purpose we use the same weight as the paper for which it is to be used.

Sheet Making Directions

Fill pulp chamber to a depth of 4 inches over the wire with clean water, then measure out a quantity of screened pulp equivalent to the desired weight which is 32 pounds ($24 \times 36 - 500$) and pour into pulp chamber, then agitate gently, at the same time adding water until the pulp chamber is nearly full, then release the quick opening discharge valve.

Couching

Couch the sheet off the wire with a sheet of dry, clean blotting paper and cover at once with another sheet of dry, clean blotting paper.

Stacking

If more than one sheet is made at the time there must be ten sheets of dry blotting paper between each test sheet and six sheets on the top and bottom of the stack, all stacked evenly so that each test sheet is in the same relative position.

First Pressing

The stack containing test sheets and blotting paper are placed in the press and given the maximum pressure of 200 pounds per square inch and allowed to remain three minutes.

Second Pressing

The stack is removed from the press, the wet blotting paper placed in the oven to dry, and the test sheets placed between dry, clean sheets of blotting paper, stacked evenly as before, except that two sheets of blotting paper between each two test sheets will be sufficient. The stack is then placed in the press and allowed to remain five minutes.

Drying

The test sheets are removed from the press and blotting paper and placed in the oven at a temperature of 50 degrees Centigrade and allowed to remain until bone dry which will take about 15 minutes. When the test sheets are dry they are again placed between sheets of blotting paper (kept for this purpose) and contain an amount of moisture equivalent to the humidity of the room. The test sheets and special blotting paper are placed in the press and given the full pressure for a period of ten minutes.

Testing

The test sheets are taken from the press and tested for strength with the standard Mullen tester in the following manner. One single test midway between corners about one inch from the edge, the same on the opposite side of the sheet. The sheet is then folded once the opposite way from which the two previous tests were made and three double tests made about one inch from this edge.

Calculations

The test sheet is trimmed to exact size (8 by 8 inches) made bone dry and weighed, the eight tests averaged and the percentage points per pound calculated.

$$\frac{\text{Average Mullen test} \times 100}{\text{Basis weight}} = \text{Percentage points per pound.}$$

* Presented at fall meeting of TAPPI, Richmond, Va., Sept. 25, 1929.
[1] Member TAPPI; Chemist, Lake St. John Paper Company, Dolbeau, Quebec.

Equipment and Research Work of the Bureau of Standards Paper Mill*

By Merle B. Shaw[1]

The equipment of the bureau paper mill is adequate for practically all types of paper-making research, and is adapted for paper-making tests on either laboratory or semicommercial scale. Lantern slides of the equipment have been prepared and when supplemented with brief oral explanations will serve to sufficiently describe it for the present.

I. Laboratory

The laboratory equipment consists of a rotary boiler, small beaters, fiber-sheet mold, sheet press, and drier.

LABORATORY ROTARY BOILER.—The boiler, Fig. 1, has been found to give excellent results in laboratory-scale pulping experiments. Its length is 18 inches, diameter 8 inches, and capacity 12.5 liters. It is driven by a one-fourth horsepower motor, through a worm gear mechanism, at a speed of four revolutions per minute. Heat is applied externally by gas burners. Two hand-holes, midway between the ends and opposite each other, permit easy removal of the cooked material. A thermometer, graduated in 5 deg. units from 50 to 400 deg. F., and a pressure gauge reading from 0 to 200 pounds, are attached to the boiler.

BEATERS.—A one-half pound beater is usually employed in the preparation of the stock. The laboratory beating equipment and procedure are not yet as satisfactory as we would like for them to be and will therefore not be discussed at this time. Further study of the beaters is necessary before our procedure can be standardized. At the present time, however, the beating consists of simply separating and brushing out the fibers until there are no lumps or knots and the stock can be made into well-formed sheets.

FIBER-SHEET MOLD.—A method for making small sheets of fiber, uniform in quality (weight, formation, etc.) and free from the personal factor present in sheets made by hand by the usual method, has been found essential for studying certain paper problems. The necessity for such sheets in the research work of the paper mill has led to the construction of a fiber sheet mold, which has given very satisfactory results.

The mold, Fig. 2, consists of three castings, two brass and one aluminum. Fitted into the base of the top section is a sheet brass box, 10 by 12 inches, open at top and bottom and forming a deckle box. On the under side of the deckle base a rubber gasket is cemented (with shellac), thus making a tight seal when the deckle is clamped down.

In the mold casting is a perforated brass plate, drilled with ½-inch holes at 5/8-inch centers. A 10-mesh wire cloth is stretched over the plate and soldered to it at the edges. A 60 or 80-mesh wire cloth is stretched taut over all and the frame is screwed down, thus holding the wire. Litharge and glycerine are poured on the sides to make the joint tight and prevent leaking.

The base casting is of aluminum. A rubber tube fitted into a groove in the top of the casting supports the mold and effects a tight seal. The outlet at the bottom of the casting is fitted with a quick-opening gate valve, which, for suction purposes, is connected to a steam ejector below.

The pulp from which the hand sheets are to be made is diluted

* Presented at fall meeting of TAPPI, Richmond, Va., Sept. 26, 1929.

[1] Member TAPPI; paper technologist, U. S. Bureau of Standards, Washington, D. C.

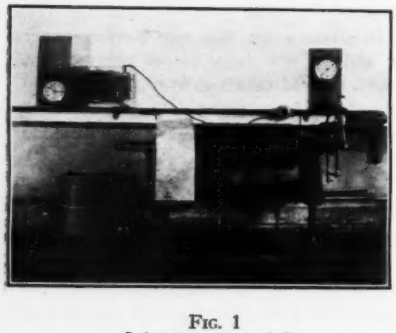


FIG. 1
Laboratory rotary boiler.

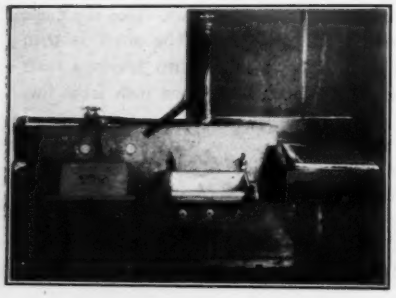


FIG. 2
Fiber sheet mold, with parts separated.

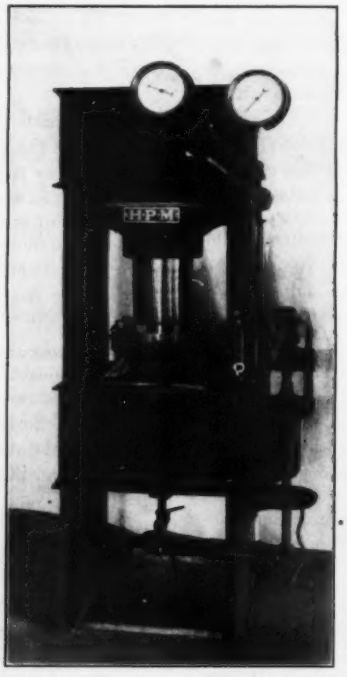


FIG. 3
Sheet press.

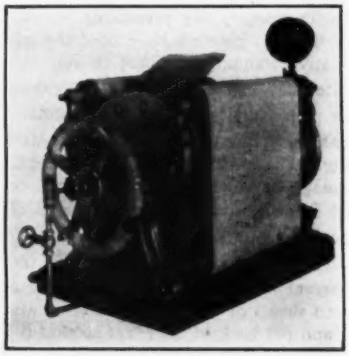


FIG. 4
Laboratory sheet drier.

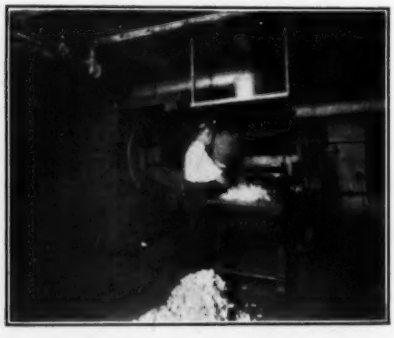


FIG. 5
Rag cutter

FIG. 6
Rag duster.

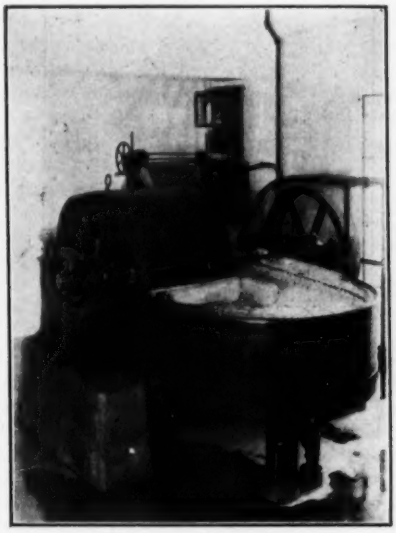


FIG. 8
50-pound beater.

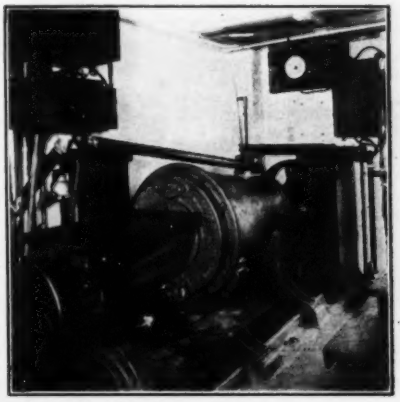


FIG. 10
Jordan.

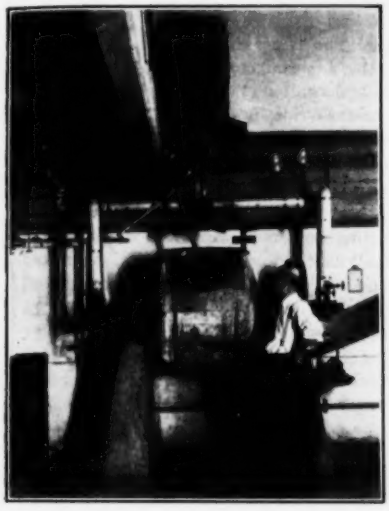


FIG. 7
Rotary boiler.

FIG. 9
300-pound beater.

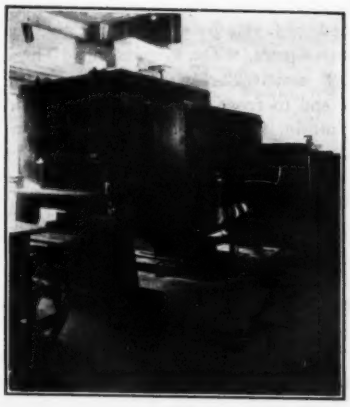


FIG. 11
Screen.

with water to a definite volume. The resultant stock is thoroughly mixed and a definite amount is taken for each sheet. This amount is diluted still further in a 1-gallon copper measuring dish, the final concentration being approximately 0.2 per cent. Water is poured into the assembled sheet mold until it reaches a height of about 4 inches in the deckle box, the stock is distributed evenly over the mold and the steam-ejector and drain valves are opened. The water and stock are drawn down and the sheet of pulp is formed on the wire.

The fiber sheet on the mold is then covered with a napless felt and upon it a perforated metal plate, a couching frame, is placed. The couching frame, felt, sheet of pulp, and wire cloth are removed as a unit, inverted, and replaced on the mold base. Suction is again applied and the fiber sheet is transferred to the felt thereby.

SHEET PRESS.—The sheets are pressed in a hydraulic press before being dried. The fiber sheet on the mold and the felt on which it rests are removed together and placed felt down on a metal plate. Another felt is laid over the sheet of pulp and upon it another metal plate. This process is repeated until there are five sheets of pulp in the stack. The stack of plates, sheets, and felts are placed in the press, Fig. 3, and subjected for one minute to a pressure equivalent to 200 pounds per square inch. Any pressure from 0 to 800 pounds per square inch can be maintained, however, between the pressing surfaces.

LABORATORY SHEET DRIER.—The drier, Fig. 4, consists of a steam-heated cylinder and a carrying felt which covers most of the cylindrical surface.

The sheet making has been discussed in considerable detail but this was believed to be desirable on account of the importance of uniform test sheets in research work.

2. Semicommercial

The semicommercial equipment has been designed to be as flexible as possible in order that it might be adapted to the needs of the various problems. Practically the same equipment was used in the experimental work on condenser paper, high-grade rag tissue, as in the manufacture of roofing felts. The semicommercial mill, which houses the laboratory equipment also, is located in the basement of the Industrial Building of the Bureau, this section of the building being especially designed for its accommodation. The mill occupies approximately 8,000 square feet of floor space, of which 3,000 square feet is furnished by a mezzanine floor.

RAG CUTTER.—Fig. 5 shows the rag cutter. Like all rag cutters the essential parts are a revolving knife cutting against a stationary bed knife, and a means of feeding the rags to the cutter.

RAG DUSTER.—Fig. 6 shows the rag duster. This duster does not differ essentially from the general type and is described in most of the standard books on paper making.

ROTARY BOILER.—The rotary boiler, Fig. 7, is of the cylindrical type, 3 feet in diameter. Its volume is approximately 14 cubic feet, and its capacity from 100 to 150 pounds of dry material, depending on the bulkiness of the material. The boiler is equipped with pressure gauges, a thermometer, a disc water meter, and a reducing valve. It is driven through a worm and gear drive by a 3 horsepower motor, at a speed of one revolution per minute. A 1½-inch blow-off connection which can be swung into position and readily connected to the sewer when desired is provided. A similar drainage connection also is included.

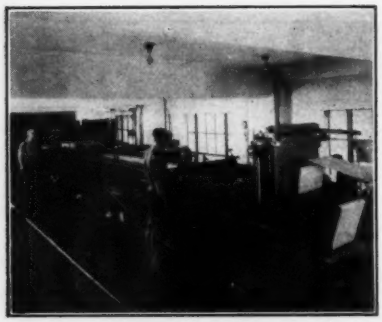


FIG. 12a
Fourdrinier machine (wet end).

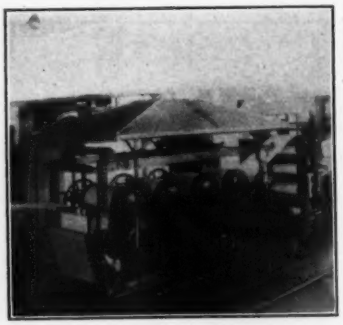


FIG. 12b
Fourdrinier machine (dry end).

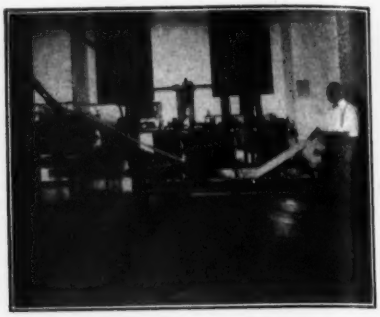


FIG. 13
Surface sizing vat and mixing tanks.

BEATERS.—The beating equipment includes a 50 and a 300-pound beater, Figs. 8 and 9, respectively. The 50-pound beater is of the usual wooden-tub type with adjustable roll, of which the diameter is 24 inches and the face 17 inches. It has manganese-bronze bars, 36 in number, and travels about 210 revolutions per minute, giving a peripheral speed of approximately 1,300 feet per minute. The 300-pound beater was an entirely original design. The tub is of poured and reinforced concrete construction and is lined with ¾-inch square, white, vitrified tile. The bottom of the tub is practically semicircular in cross-section, and has a total pitch from back end to front end of 7 inches in a distance of about 14 feet. All interior metal parts are of bronze or of brass. The diameter of the roll is 40 inches and the width 34 inches. The roll contains 44 bars, of a bronze and steel alloy, and is operated by a variable-speed motor.

STUFF CHESTS.—The stuff chests are not shown but the equipment includes five of them, three of the vertical and two of the horizontal type. The vertical chests each hold one furnish of the 50-pound beater; the horizontal chests each hold one furnish of the 300-pound beater. The chests are so connected that it is possible to pump stock from any one to each of the others or to either the paper machine or the Jordan refiner.

JORDAN.—The Jordan, Fig. 10, is a Smith and Winchester refiner. It is equipped with bars of a bronze and steel alloy and is driven by a variable-speed motor.

SCREEN.—The screen, Fig. 11, is a 4-plate flat or diaphragm type, which is so well known in the industry that a description is unnecessary.

PAPER MACHINE.—The paper machine is a 29-inch Fourdrinier, Figs. 12A and 12B. Sheets can be made any width between 12 and 26 inches and the machine can be operated at any speed between 7 and 70 feet per minute. The wire is 33 feet long and there are two presses, nine 15-inch driers, a small machine stack of seven rolls, and a reel. The auxiliary equipment consists of two brass stuff pumps, a fan pump, and a Nash type suction pump.

SURFACE SIZING.—The equipment used for surface sizing paper is shown in Fig. 13. The mixing tanks shown in the background are used in preparing the sizing solutions, coating mixtures, and clay slips.

The vat for the sizing solution is an open wood box, 58 by 24 by 8 inches. It is heated by a steam coil of ¾-inch galvanized iron pipe 20 feet in length, and contains three adjustable rolls for regulating the degree of immersion of the paper in the bath. The squeeze rolls are 5 inches in diameter. The upper roll is brass and the lower one has a rubber covering on a steel core. The paper after passing through the bath is festooned and dried. The festooning is shown in Fig. 14.

COATING.—The paper-coating equipment, Fig. 14, consists of a 14-inch Waldron, flat-bed, brush coater with festoon drier and rewinder. The festoon rack is 15 feet long and has a capacity of 28 loops, each 6 feet in length. With the uptake rack and the rack from the festoons to the reel, the capacity of the drier is 400 feet. The drier is now enclosed in a cabinet equipped for air conditioning and temperature control. The view shows the festoon system before the cabinet was installed.

SUPERCALENDER.—The calendering equipment includes a 5-roll Perkins supercalender, equipped to calender paper either in the web or in sheets, and is shown in Figs 15A and B.

The electrical drive is such that the calender can be run at almost any speed desired. The lever-weight arms are raised or lowered hydraulically. The calender is supplied with three steel and three cotton rolls. The top and bottom rolls used are of steel but the other rolls can be alternated or the three cotton rolls can be used together.

The laboratory equipment is used in preliminary tests to investigate the physical and chemical nature of the paper-making materials to be employed. The material is cooked, the chemical consumption and the yield of fiber are determined, and the pulp is made into hand sheets and tested. If the results obtained indicate that the material is sufficiently promising to warrant additional tests, and sufficient quantity of it is available, the investigation is continued on a semicommercial scale. In either case, the data derived are assembled and published.

FIG. 14
Coating machine and festoons.

FIG. 15a
Supercalender (web calender).

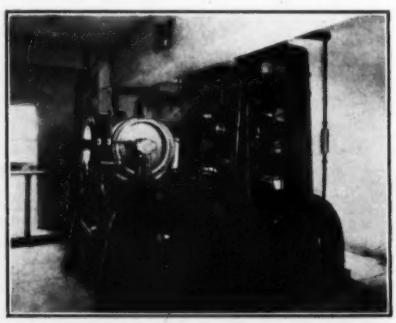


FIG. 15b
Supercalender (sheet calender).

Research Accomplishments

The experimental work of the paper mill includes determining the paper-making value of new materials, and the paper-making procedure which give the best results with commonly-used commercial materials.

The research work of the paper mill during the past few years has been reported in the following publications:

A Study of the Experimental Manufacture of Condenser Paper.
Rubber Latex in Paper.
Aging of Rubber Latex Paper.
Seed Flax Straw as Paper-Making Material.
Cotton Stalks as Paper-Making Material.
Comparison of American and Foreign Clays as Paper Fillers.
A Comparative Study of Paper Fillers.
Stipu Ichu Grass as a Paper-Making Material.
Manila Rope Waste for Paper Manufacture.
Esparto as a Paper-Making Material.
Method of Making Uniform Fiber Sheets for Test Purposes.
Hydrogen Ion Concentration in the Paper Mill.
Glue as Engine Sizing.
Use of Glue in Coated Paper.
Waste Mail Pouches as Paper-Making Material.
Caroa Fiber as a Paper-Making Material.
Experimental Production of Roofing Felts.
Research on the Production of Currency Paper in the Bureau of Standards Paper Mill.

Completed work now in process of publication includes "Rayon Waste as a Paper-Making Material," and "Further Experimental Producion of Currency Paper in the Bureau of Standards Paper Mill."

The major investigations now in progress are "Coating" and "Study of Paper-Making Quality of Fibers."

A number of different clays are being used in the work on coating. Casein, glue, and starch are the adhesives being employed. Color measurements and printing tests will be made on the finished papers.

In the study of the paper-making quality of fibers, papers are to be made from the materials used commercially for manufacturing writing and book papers. Representative commercial grades of each material will be obtained from paper manufacturers. The objectives of this work are to obtain under known conditions, papers that will afford a better basis of comparison than the commercial products; and to introduce variables known to be harmful, such as over-bleaching, high acidity, and over-beating, for the purpose of observing their effect on the different papers. This is a big field and will require considerable time, but we believe the resultant data will be of considerable value to the paper industry.

Powell River To Build News Print Mill

VANCOUVER, B. C.—Powell River Company has obtained the award of the Lois River power rights on Vancouver Island, and will start work at once on construction of an initial power unit and will also install an additional papermaking machine. Cost of the first power unit will be $6,000,000 to $8,000,000.

Site of the new power project is about ten miles south of its present news print plant. Eventually development will produce 32,000 hp., which will be transmitted to the news print plant over high-tension wires. About half of this will be developed within the next year or two.

The additional news print machine will have an output of 35,000 tons annually, and will be ready, under present plans, by the middle of 1931. Production capacity of the Powell River plant is now 495 tons daily.

Goes With Eaton-Dikeman Co.

LEE, Mass., November 4, 1929.—Arthur T. Randall, of the Westinghouse Electric and Manufacturing Company, has just become chief engineer for the Eaton-Dikeman Company of this town.

New TAPPI Members

R. S. Baker, consulting engineer, 416 Wellington street, Ottawa, Ontario.

S. W. Blanchard, assistant manager, Crown Willamette Paper Company, West Linn, Ore.

R. H. Boedeker, manager, A. Ahlstrom Osakeyhito, Warkaus, Finland.

G. M. Fowler, chief chemist, Canada Power and Paper Corporation, Grand Mere, P. Q.

F. F. Frothingham, sales engineer, Bird Machine Company, Chicago, Ill.

H. V. Koskull, chemist, Continental Paper and Bag Corporation, Rumford, Me.

Charles Hartig, partner, Hugo Hartig, Hamburg 1, Burchardstr. 1, Germany.

Enoch Lindbom, general superintendent, Bonaventure Pulp and Paper Company, Chandler, P. Q.

Sten Lindquist, sales engineer, Erkens Corporation, 122 E. 42nd street, New York, N. Y.

E. J. Owens, assistant superintendent, Erving Paper Mills, Erving, Mass.

H. W. Rimbach, assistant research chemist, Oxford Paper Company, Rumford, Me.

Louis Scodella, night foreman, British Columbia Pulp and Paper Company, Port Alice, B. C.

A. A. Scott, physicist, Anglo-Canadian Pulp and Paper Mills, Quebec, P. Q.

John Van Ounsem, pulp and paper tester, A. D. Little, Inc., Cambridge, Mass.

D. R. Weedon, general sales manager, Hungerford & Terry, Inc., Clayton, N. J.

G. R. Wholean, chief engineer, Strathmore Paper Company, Mittineague, Mass.

A. W. Wickham, superintendent, MacAndrews & Forbes Company, Camden, N. J.

R. I. Wynne-Roberts, engineer, International Paper Company, Bureau of Tests, Glens Falls, N. Y.

Proposed Federal Specifications

The Federal Specifications Board is adopting and promulgating purchase specifications for commercial commodities purchased by the various departments and establishments of the United States Government.

These specifications, in the formative stage, are submitted to representative manufacturers for their comment and criticism.

Proposed specifications have just been sent out for Photographic Negative Paper and Photographic Black Line Paper.

The Federal Specifications Board will be glad to receive any comments or suggestions as to changes which may be thought to be desirable in the specification. Such comments or criticisms will have to be received by the board not later than December 6 if they are to receive attention of the technical committee considering this subject.

New Pehrson Rotary Dryer Catalog

The Technical Economist Corporation, of 122 East 42nd street, New York, have just published a new catalog which describes and illustrates the Pehrson Rotary Dryer. Three methods of bringing hot gases and materials to be dried into contact are explained.

This new dryer is now being used extensively for drying chips and bark. The drying of wood chips for paper and cellulose pulp is of great advantage as it ensures a greater uniformity of the raw material, and the shrinkage on drying increases the output of the digestors.

Future Possibilities in Roofing Felt Manufacture

By K. B. Howell[1]

In the July 8, 1926, issue of the PAPER TRADE JOURNAL there appeared an article by the writer entitled "Operating Economy of the Roofing Felt Industry." In this article attention was directed to the wide discrepancies between existing plants in the consumption of material, labor, steam and power and certain other features of operating economy. A reasonable standard for such items was suggested on the basis of actual accomplishments at certain mills, and it was pointed out that conditions in the industry were rapidly approaching a point where such economy became essential to continued existence. Since then, the anticipated competitive conditions have occurred and have compelled the direction of extreme efforts toward reduction in cost of roofing manufacture. Some of such effort has come in mills with which the writer has been connected and the accomplishments in such mills have aggregated something over $500,000 yearly savings, exclusive of any savings resultant from reduction in prices of raw material, wage or power rates. Data is not available to measure the accomplishment of the industry as a whole, but reports from mills other than those coming under our direct observation have indicated that while admitting in 1926 a measure of skepticism toward certain possibilities pictured in the above article, these mills by diligent effort have found possible much in the way of their attainment and it is conservatively believed that something over $1,000,000 has been achieved in yearly savings by the industry as a whole during the past two years.

Emboldened by the accomplishments in the more universal attainment of the ideals then presented, the writer in the present article aims to point out features of roofing plant operation which appear capable of further improvement. The present picture finds some support in accomplishments at existing mills, but also concerns itself with problems for which the solution must be sought in experimental and development work as yet incomplete, and, in some cases, only visualized.

Roofing felt is the base material from which asphalt shingles and roofings are manufactured. The consumption of the latter products is following a normal, steady increase in home building construction and the present consumption of roofing felt in such manufacture is approximately 350,000 tons yearly. The manufacture of asphalt roofing products is one of relative simplicity, consisting of the saturation of the roofing felt with an asphalt saturant, the application of an asphalt coating thereto, the embedding of slate or mineral granules in such coating, and a final processing to form the shingle or roll goods desired.

Roofing Felt Requirements

The essential requirements of the roofing felt base consist in a strength adequate to the processing required, a saturability capable of permitting the ready absorption of the required amount of asphalt saturation, and a composition capable of meeting the durability requirements of the finished roofing.

The principal raw material used in roofing felt manufacture remains at present roofing rags and paper, although numerous other fibrous materials are being successfully employed in part replacement. The general process of manufacture consists in a reduction of the rags to small pieces by the use of rag cutters, the further defibring of such rags in beaters and jordans and the processing of the resultant rag stock into a paper web on a paper machine, usually of cylinder type.

In certain respects the manufacture of roofing felt suffers from its process similarity to the usual paper making operation, a condition which has led to the employment of much of the usual paper making equipment and methods with incomplete recognition of the difference in ultimate requirements or appropriate adjustment therefor. Perhaps this conditions is best illustrated in the defibring operation above referred to. In the manufacture of certain grades of paper, a treatment of the fibres to maintain certain degrees of what is termed hydration has developed and justified a reliance upon the use of beating engines and jordans. In roofing felt manufacture, hydration is neither essential nor desired, the object being the reduction of the fibers to proper length as quickly as possible with the least expenditure in labor, power and fixed charges. There is at present no conclusive evidence indicating that the beating engine or jordan represents the most economical unit for accomplishing such purpose.

Rag Reduction

In viewing the possibilities in improvement of the process of reducing the rags to stock, such process must be considered as a whole. The original procedure (and that still followed by many mills) was a batch operation wherein the rags were first cut and thence stored pending their later charging into individual batch beaters. Certain improvements on this process have been effected in recent years, but chiefly the improvement has concerned itself with reduction in labor requirement in the operations. The improved systems fall rather naturally into three classes, the direct conveyal system, the half stuff system and the continuous system. In the first mentioned, the rags are conveyed from cutters directly to the batch beaters, the operation of cutters thereby joining the beater operation on a 24-hour daily schedule but permitting of elimination of considerable labor formerly required in storage and rehandling of cut rags to beaters. In the half stuff system, the rags from the cutters are conveyed to one or two breaker beaters wherein they are reduced to a half stuff condition and thence pumped to individual batch finishing beaters wherein final reduction is carried out. The continuous system developed by the writer arranges for passage of the cut rags to a primary beater from which partially defibered stock is continuously discharged to secondary beaters, passing from one beater to the next in series, the final stock ready for the paper machine being delivered by the last beater of such series. While labor savings are effected by all three improved systems, the latter two have certain advantages in the way of restriction of foreign material liable to damaging equipment to the primary or breaker beater, with consequent savings in maintenance expense.

When we look at the above process, it is difficult to find assurance that either rag cutters or beaters necessarily represent the most efficient equipment and it is here that considerable room for experimental future development work seems reasonably possible. Certain types of equipment are now being given consideration and others may be developed. Among the possibilities are the hammer mill and the rod mill. The former handles dry rags and delivers in dry form fiber reduced to closely approximate roofing felt length. The use of the rod mill is a wet process treatment which is in similar effect to replacement of the beaters. Neither of these processes have been applied to rag treatment with sufficient extent to permit adequate determination of capacities and power consumption, and until such information is obtained their possibilities must remain a matter of question, but it is clear that both cutters and

[1] Member TAPPI; Industrial engineer, Glen Ridge, N. J.

beaters in power consumption, maintenance and fixed charges are extremely inefficient machines as measured by the work performed and the development of a process for accomplishing such work at very considerable reduction on present costs seems well within the scope of a probability.

Another source of possible economy may here be mentioned. Roofing stock is necessarily long fibered to meet the combined requirements of saturability and strength. Incident to maintenance of a normal desired fiber length, a certain amount of excessively long fibered material becomes a component of the stock and must be abstracted at the screens. Too great a proportion of such extra long fiber interferes seriously with the screening operation, produces excessive screening rejects, occasions the enmeshing of normal length fiber in such rejects and resultantly effects the uniformity of weight control. The introduction of a screening operation as the stock leaves the final beater of a continuous system, with rejects returned to the system, should permit the carriage of longer fibered stock to the machines with avoidance of power wastage and at the same time materially improve subsequent operation at the paper machine.

Variations in Weight and Caliper

The uniformity of weight control is in itself a field for much improvement in the roofing felt process. In current manufacture there is an unreasonable variation in weight or caliper of product which may be traceable to four causes: (a) variation in speed of prime mover; (b) variation in measurement of stock; (c) variation in consistency of stock; (d) variation in amount of stock abstracted as screening rejects. The first condition is simple in correction and should not exist. Difficulties in measurement follow from the long fibered character of the stock and presence of foreign materials, which tend to clog openings. Much of such difficulty is removed by the continuous beating process and further improvement should follow the auxiliary screening operation previously outlined. Methods for control of consistency have similarly suffered from the long fibered character of the stock and its content of foreign material and should be subject to improvement with similar corrective measures. It is somewhat questionable whether a secondary screening operation at the machines is required in event of the application of screening in the beater operation but if employed the amount of tailings should be relatively insignificant and the effect of their fluctuations upon the weight control negligible.

Drying

Another fruitful field for improvement in roofing felt economy lies in the drying process. This is at present conducted over usual paper mill driers in which steam at pressures varying from 40 to 75 pounds is employed. In some instances the steam supplied represents the exhaust from prime movers; in other cases it is directly supplied by the boilers through a reducing valve. The latter process is, of course, poor economy in failing to avail itself of a certain amount of relatively cheap power obtainable by employing a prime mover as the reducing agent. The employment of the high pressures in the driers is also subject to some criticism. It is a condition which apparently has developed from desire at times to obtain additional production which can be realized from existing equipment by increasing the heat transfer rate through raising the steam pressure. Against such consideration is the fact that the amount of power obtainable from the prime mover is much greater with an exhaust of 15 pounds as compared with 50 pounds. In a new installation, after allowance of all operating and fixed charges, the economy generally favors the employment of the lower pressures, particularly where the plant contemplates generation of its own power by a turbine generator of the bleeder type. In existing mills the charges for scrapping equipment, additional drier investment and the difficulties of locating same frequently make provision for reduction of the steam pressure inadvisable except in an anticipatory portion of a general future program.

Numerous other possibilities for improvement in the drying process can hardly escape notice. This process is at best far from efficient from a thermal standpoint. Only about 50 per cent of the heat value of the steam is utilized in evaporating the water from the sheet of felt. Allowing a boiler efficiency of 75 per cent only about 37½ per cent of the heat value of the fuel is thus utilized. Vacuum systems of drying offer opportunities for considerable improvement on such thermal efficiency, but until their applicability to roofing felt manufacture can be more thoroughly studied with a detailed analysis of investment costs, an appraisal of their possibilities can hardly be estimated. Another possibility lies in the field of direct heat driers, the heat to be supplied by flue gases or the use of air heated by flue gas. There remains considerable study necessary to determine the most feasible method of application of the direct heat drier but it offers a reasonable justification in the way of an improved thermal efficiency and the possibility for elimination of the boiler plant except for winter mill heating purposes. If the requirements for process steam for drying is eliminated, few plants can afford to generate power in competition to public utility rates, and the necessity of the boiler plant, except for minor plant heating, is removed; a consideration well worth the investigation which direct heat drier application may entail.

Air Handling in Drier Section

A further opportunity for improvement in the drying process in existing mills rests with the so-called vapor absorption systems which are frequently used as a supplement to the steam driers. These systems, as at present employed, arrange for the heating of air with steam coils and the delivery of such heated air across the sheet of paper. They provide better atmospheric conditions in the machine room and effect a yield of increased production from existing drier equipment but can hardly be regarded as improving the economy of operation, the steam consumption in heating the air, the power requirements in driving the fan and the maintenance and fixed charges on the investment substantially balancing the savings resultant from increased production. Where, however, the heated air may be obtained by utilization of waste flue gases from a boiler plant or even partly supplemented by a direct fired air heater, an opportunity for saving becomes a possibility which warrants very thorough consideration in existing mills as well as new installations.

In the foregoing we have endeavored to point out problems in roofing felt manufacture capable of improvement with suggestions toward their approach. It is not intended to create the impression that such suggestions will represent the ultimate development or that there is a reasonable probability thereof. The principal purpose is to indicate the field for improvement, but much experimental and development work will be required to determine the most practicable solutions.

Possible Costs for Roofing Felt Manufacture

With a thorough recognition of such position we are tempted to conclude this article with an attempted picture of the probable costs which might be expectant of realization with processes and equipment developed along lines of the suggestions herein pictured. A mill of 80-ton daily output is taken for examination. In case one; we are given representative costs for the average existing mill not favored with one of the more recent improved type of beating systems; in case two, we picture the costs of a modern mill equipped with a continuous beating system. Thence, leaving the field of demonstrated performance we proceed in case three to give estimated cost of production for a modern type mill wherein present cutting and beating operation is superseded by a new defibering system, such as has been previously mentioned as capable of probable future development. The power consumption

for such a process is estimated at a total figure of 170 k.w. hours per ton of felt. While this value must remain largely a guess, there is ample evidence of power wastage in the present use of beaters and jordans and some evidence regarding the power consumption of certain equipment considered in replacement which seems to justify an expectation of development of equipment to require a power consumption not in excess of 170 k.w. hours per ton of output.

In this case the usual type of paper mill driers are employed but with steam pressure reduced to 15 pounds utilizing bleed steam from a turbo generator to supply drier requirments.

Economical Fuel Arrangement

The amount of such bleed steam is such as to substantially develop the power requirements of the plant with little passage of steam to the condenser, so that a very economical arrangement in fuel economy is provided. In case four is shown costs under an arrangement combining the above mentioned probable development in defibering process with direct heat drying. While the resultant operation costs under case four are somewhat higher than under case three, lesser investment costs are required resultant through elimination of the need of boiler plant or power generation equipment.

CASE I

		Cost Per Ton
Productive Labor:		
Receiving and shipping	100 man hours daily	
Cutting	100 man hours daily	
Beating	144 man hours daily	
Machining	168 man hours daily	
General factory	48 man hours daily	
	560 man hours daily	$ 4.20
Steam and Power:		
Fuel	1 ton @ $4.00	4.00
Other power plant expenses, maintenance and fixed charges		2.50
Repairs: Labor and material		3.00
Felt expense		.75
General factory: supplies and lubrication		.35
Supervision and clerical		2.50
Fixed charges (exclusive of power plant)		2.50
Total		$19.80

CASE II

		Cost Per Ton
Productive Labor:		
Receiving and shipping	60 man hours daily	
Cutting	96 man hours daily	
Beating	48 man hours daily	
Machining	96 man hours daily	
General factory	20 man hours daily	
	320 man hours daily	$ 2.40
Steam and Power:		
Fuel	.6 ton @ $4.00	2.40
Other power plant expenses including maintenance and fixed charges		2.25
Repairs: Labor and material		2.75
Felt expense		.60
General factory: supplies and lubrication		.35
Supervision and clerical expense		2.50
Fixed charges		2.28
Total		$15.53

CASE III

Productive Labor:		
Receiving and shipping	60 man hours daily	
Dry process defibering	96 man hours daily	
Wet process	48 man hours daily	
Machining	96 man hours daily	
General factory	20 man hours daily	
	320 man hours daily	$ 2.40
Steam and Power:		
Fuel	.3 ton @ $4.00	1.20
Purchased power		....
Other power plant expenses including maintenance and fixed charges		1.75
Repairs: Labor and material		2.50
Felt expense		.60
General factory: supplies and lubrication		.35
Supervision and clerical expense		2.50
Fixed charges		2.52
Total		$13.82

CASE IV

Productive Labor:		
Receiving and shipping	60 man hours daily	
Dry process defibering	96 man hours daily	
Wet process	48 man hours daily	
Machining	96 man hours daily	
General factory	20 man hours daily	
	320 man hours daily	$ 2.40
Steam and Power:		
Fuel	.25 ton @ $4.00	1.00
Purchased power	170 k.w. hours @ 1.5 cents	2.55
Other power plant expenses including maintenance and fixed charges		.20
Repairs: Labor and material		2.50
Felt expense		.60
General factory: supplies and lubrication		.35
Supervision and clerical expense		2.25
Fixed charges		2.32
Total		$14.17

Report of Paper Board Committee*

By C. C. Heritage[1], Chairman

The organization of the paper board committee in more or less permanent form in such a way as to cover the many fields of work which paper board manufacture includes, was thoroughly discussed in open session, at the close of the sectional meeting held during the annual convention in February. As a result of this discussion, it appeared desirable to enlarge the membership of the committee and form three subcommittees.

Subcommittee No. 1 is functioning as regards *paper board quality* and *converted products* in the following fields:

(a) Classification of converted products according to requirements of use, with determination of corresponding important properties.

(b) Determination of the effects of the conversion variables on cost and quality.

(c) Classification of paper board itself according to requirements of use or conversion with determination of corresponding important properties.

E. F. Whittington of the Sutherland Paper Company is leading this committee of nine members representing manufacturing and converting mills and converting equipment manufacture. Present plans call for classifying paper board according to use followed by studies of those testing methods for properties found to be most important in the greatest number of classes.

Subcommittee No. 2 is functioning as regards the *Cylinder Machine* itself in the determination of the effects of the machine variables on cost and quality of paper board. George R. Wyman of Bird and Son is leading this committee of eight representing manufacturers of board, board machines and felts. Interest has centered largely around the variables of stuff temperature and consistency, wet pressing and calendaring.

Subcommittee No. 3 is functioning as regards *raw materials* and *stuff* in the following fields:

(b) The effects of the refining variables on cost and quality of stuff.

(c) The requirements and properties of the fibrous raw materials particularly waste papers.

Arthur R. Harvey of the Gardner and Harvey Company is leading this committee of eight representing manufacturers of boards of wide variety and of refining equipment. Interest is centering in satisfactory methods for testing waste papers of various grades and studies of Jordan performance.

* Presented at fall meeting of TAPPI, Richmond, Va., Sept. 24, 1929.

[1] Oxford Paper Company, Rumford, Maine.

Pulp and Paper Exports Show Increase

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., November 6, 1929.—Exports of pulp and paper from Norway, Sweden and Finland during the first eight months of this year with few exceptions show an increase as compared with the corresponding period of last year.

The most substantial gains have been by Swedish wood pulp exporters, their shipments of ground wood having increased 37 per cent, while exports of sulphite pulp show a rise of 67 per cent and of sulphate pulp of 73 per cent.

White Water Loss Determinations

By Frederick Wierk[1]

In most mills the white water measurements can be most easily made by means of a weir, and as the rectangular weir with end contractions is an easy type to install and operate, our description, and the accompanying charts, will be limited to this type of weir.

The weir should be located in an open channel through which passes all the white water to be measured after it has left the mill. The general scheme of a rectangular weir with end contractions is shown in Fig. 1.

The weir proper is simply an accurately finished rectangular slot (usually in a thin vertical metal plate bevelled on the downstream side mounted at the top, and forming part of a dam. The height (H) of the water going over the weir is measured as the difference in elevation between the crest of the weir and the level surface of the water in the channel so far upstream that the depression of the upper surface of the water going over the weir is regligible. The distance, ahead of the weir, for accurate measurement of H should be about 6 times H. In contracted weirs the depth of the channel should be about 3 times H and the distance from the lateral edge of the weir to the side of the upstream chan-

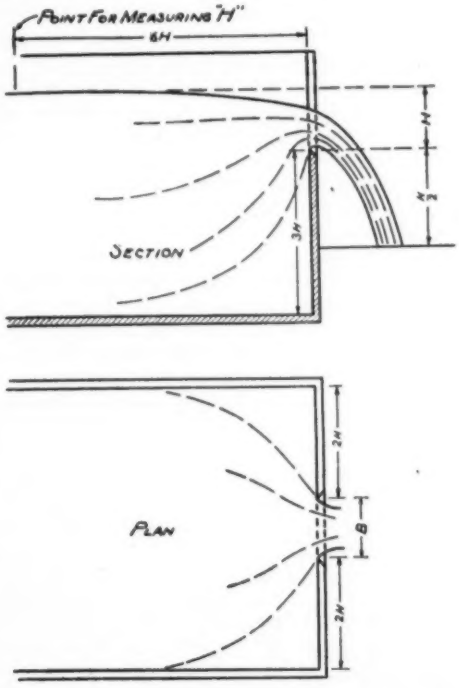


FIG. 1 CONTRACTED WEIR

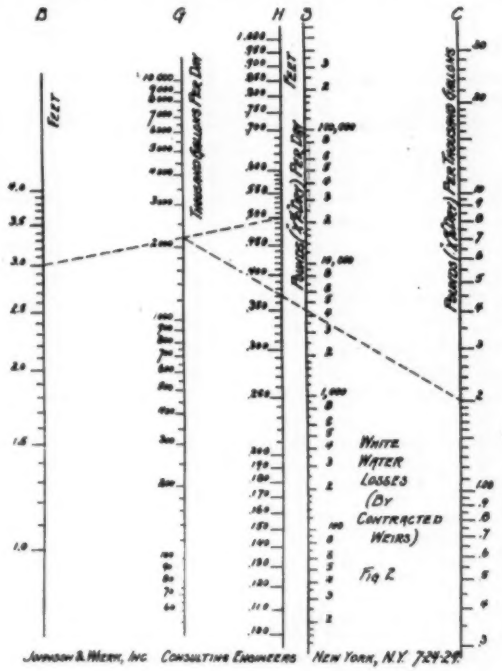
nel should be about 2 times H. The crest and lateral edges should be sharp and bevelled back at about 45° on the downstream side. Free access of air to the under side of the overflow is essential.

The width (B) should be chosen large enough to avoid unduly high values of H. If one has in advance an approximate idea of the rate of flow, the table in Fig. 2 may be used to decide upon the proper width to employ. If, after trial, high values of H are found to occur over a narrow weir, it may be advisable to increase the width of the opening. For a small discharge (say 100,000 gal. per day) B can well be ten times H, while for a discharge of over 5,000,000 gal. per day, the B should be about four times H.

[1] Member TAPPI; Consulting engineer, Johnson & Wierk, Inc. (Republication rights reserved by the author.)

Francis' Formula

Weirs of this type are computed by Francis' formula and the chart in Fig. 2, which is based upon this formula, will give G (the



number of thousands of gallons per day) from any B and H readings (both in feet). Having determined, from samples, the consistency C (in pounds of stock per thousand gallons) one can find S (total pounds of stock per day), corresponding to conditions prevailing instantaneously, assuming that the weir is measured, and the sample taken, simultaneously.

To arrive at a correction calculation for daily total of S, it is necessary to take frequent readings of H, and coincident stock samples which should be proportional to the flow. These samples should be representative and should therefore be taken from an active point in the stream. The samples for an entire day can be collected in one large container and one consistency determination made for a daily figure representing C. As the discharge over the weir does not vary directly in proportion to H, it is necessary to determine the G for each reading. These figures for G can be averaged for the day. The daily figures for C and G, determined as outlined above, may be applied to the chart in Fig. 2 to give S, the total pounds of stock for the day in question.

The following example has been indicated on Fig. 2.

Sample consistency	C = 2 pounds per thousand gallons
Height of weir	H = 0.5 feet
Width of weir	B = 3 feet

Between B = 3 feet and H = 0.5 feet, we find G = 2200 thousand gallons per day; and between this G, and C = 2 pounds per thousand gallons we find S = 4400 pounds of stock per day.

In the light of information obtained in this way the white water problem may be thoroughly studied. Stock reclaiming devices

which are profitably employed under certain conditions are not necessary profitable investments for all conditions. The discharge of white water and the stock contained therein will vary independently in different mills depending upon the extent to which the paper maker has been willing or able to re-use white water in his particular mill. As the problem of each mill might seem to require individual solution, no cure-all can be suggested. The method outlined above can serve merely to indicate to mill operators a convenient way to find out what their individual problems amount to.

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Pulp and Paper Industry

Clarence J. West, Chairman

Apparatus for Washing Fibrous Materials. F. B. Stratford. U. S. pat. 1,682,861, Sept. 4, 1928.—The patent relates to the removal of material from a washing tank or vat, and more particularly has reference to means for circulating the washing fluid and for periodically removing the material from the vat while in circulation; and it is more especially adapted for the washing of rags and similar materials. It also contemplates first soaking the rags without agitating, preliminary to washing, so that the softened dirt is easily separated. The rags are placed in a tank provided with a substantially central longitudinal partition. Circulation is obtained by means of rotating paddles. A series of parallel arms are periodically immersed in the washing fluid and raised out of it, carrying a certain amount of the rags which is deposited on a suitable traveling belt. For material finer than rags, the parallel arms are covered with a screen.—A. P.-C.

Thin Stock Consistency Regulator. J. A. Hedgcock assignor to the Management Engineering & Development Co. U. S. pat. 1,687,446, Oct. 9, 1928.—With stock of low consistency, the variations in flow through an orifice with variations in the consistency are not sufficiently marked to afford satisfactory means for consistency regulation. These variations, however, may be magnified to a satisfactory working magnitude by flowing the thin stock through a suitable flow passage, such as a pipe of moderate diameter constructed so as to offer a resistance to the flow of the stock, e.g., by using a pipe bent into a spiral or having a number of U-bends. In accordance with this principle, a portion of the thin stock is passed through such a pipe, and the residual head at a given point is used to control a valve in the pipe through which the diluting water is introduced. Increase in consistency reduces the residual head and operates to open the valve, and vice versa.—A. P.-C.

Stock Regulating Mechanism for Papermaking Machines. J. R. Spoor. U. S. pat. 1,689,755, Oct. 30, 1928.—The stock from the jordan is delivered into a head box with a constant level compartment, from which the stock is delivered into a hopper with a restricted outlet, passing thence to the stuff chest. The hopper is suspended from the end of a compound lever controlling a valve in the water line which supplies diluting water to the jordan head box. Variations in the consistency of the stock causes corresponding variations in the amount of stock in the suspended hopper and consequently operates the valve in the water line to vary the amount of water admitted to the jordan head box so as to maintain constant the consistency of the stock delivered to the jordan.—A. P.-C.

Suction Box. R. H. Taylor, Jr., assignor to Rice, Barton & Fales, Inc. U. S. pat. 1,680,486, Aug. 14, 1928.—The walls of the suction box are made of pieces of piping of aluminum, brass or other metal. The lengths of pipe are split in two diametrically, and each half is used for a suction box. In this way an outer wall is made of one split length of pipe, and an inner wall of a split length of pipe of the same length but of smaller diameter. The other halves of these lengths of pipe are put together in the same way to form another suction box. The two lengths of pipe constituting the suction box are spaced from each other by means of spacing strips arranged along the center at the bottom and at the top. The inner pipe is provided along the bottom with perforations to provide for the passage of the white water. The suction box is designed to support a perforated top plate or cover. The ends of the box are closed with adjustable fittings provided with adjusting rods, so that the effective length of the box may be varied according to the deckel of the sheet being made.—A. P.-C.

Stationery Deckel for Fourdrinier Paper Machine. R. E. Heisel assignor to Paper Machinery Corporation. U. S. pat. 1,679,523, Aug. 7, 1928. The deckel means comprises a deckel rail supported on a number of tubes pivotally mounted on suitable brackets carried on the side frame of the machine. The supporting tubes extend laterally from the side frame of the machine over the wire, so as to support the deckel rail above the wire. Each bracket is provided with an adjusting screw for adjusting the height of the deckel rail from the wire and with a locking screw for locking each bracket in adjusted position. Means are provided for moving the deckle rail sideways, parallel to the direction of travel of the wire, in order to vary the width of the sheet of paper. Mounted upon and rigidly secured to the deckle rails are a number of pipes by means of which water, air, or other suitable fluid may be led to the deckle arrangement under pressure. The lower portion of the deckle rail is beveled from its lower inner edge outwardly at an angle of approximately 45°, and the fluid is discharged so as to strike the wire underneath the lower edge of the deckle rail, and preferably adjacent the intersection of the inner surface of the rail with the wire. The deckle rail may even be omitted entirely, the pulp being confined merely by the action of the fluid jets.—A. P. C.

Paper Threading Device for Paper Machines. H. G. Cram assignor to Great Northern Paper Co. U. S. pat. 1,688,267, Oct. 16, 1928.—A pair of rope carriers are provided to transfer the lead strip from the last press to the first drier. A pair of compressed air blasts are provided at the delivery end of the last press to blow the lead strip into the nip of the ropes, and the latter deliver the lead strip directly into the nip of rope carriers which thread the paper through the driers. A clutch is provided whereby the auxiliary rope carriers are brought into operation only at such time as they are required and may be thrown out of operation when the paper is running normally over the paper machine.—A. P. C.

Paper Reel. A. Aldrich assignor to Beloit Iron Works. U. S. pat. 1,679,343, Aug. 7, 1928. The paper is wound by contact of the mandrel with a rotating drum. The ends of the mandrel are supported in a pair of parallel guideways within which they can rotate freely. Means are provided for discharging the wound roll by rotating the guideways. A number (preferably four) of such guideways are mounted on a rotatable support which can be driven as desired from the source of power driving the drum; and as the finished roll is discharged an empty mandrel is brought into contact with the drum to start a fresh roll.—A. P. C.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

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Edited by
THOS. J. BURKE, C. A., Sec.-Treas.

Technical Control in the Paper Mill as to Cost*

By G. F. Enderlein[1]

Technical control in the paper mill is, I think everybody will agree, one of the very important things in regard to cost. It needs a constant checking up and calls for a great deal of intense work both intellectual and physical. A systematic control, is, therefore, essential. Being employed at a Kraft Paper Mill, my paper will treat this part of the industry in a general way and details will have to be adapted and adjusted to local conditions in every mill.

Starting out with the wood, how is the wood bought? Usually by the cord—at a few places it may be bought by the foot. This measure of wood is very unsatisfactory as true measurement cannot be obtained. It has been suggested by several technical men that the wood be bought by weight which, in their opinion, would be a much more satisfactory way. However, the old system has grown on us so that it will take a considerable effort to bring this method to a standard. In weighing the wood and determining the moisture, a much better conclusion as to material bought can be had, even if it is not absolutely correct.

Cutting, Slashing and Barking Drums

Passing by the shrinkage of the wood in handling, we have next the cutting, slashing and barking drums. The longer time the wood has to be in the drum and then put back into the drum to be freed of the bark the greater the shrinkage will be depending on the soundnes of the wood. Some wood will bark best dry, others wet. In the wet barking many times warm water will speed up the barking process—so will a hotpond and other things that can be used according to local conditions.

In cutting and slashing the wood, the condition of the saw is of great importance as a considerable shrinkage takes place here. It is easily understood that a dull saw will tear the wood more than cut it and the loss in saw dust is considerably higher.

A slasher with smaller and thinner blades will, therefore, give less shrinkage than the larger heavy blades of the cutters. In chipping the wood the spout, the setting of the knives and their condition is of main importance. Big spouts for big wood and small spouts for small wood as the flopping in the spout will cause long slivers. The setting of knives to the right size of the chips and having them in good condition so as to prevent tearing instead of cutting will prevent an excess forming of saw dust and slivers that will not break up.

CONTROL—Check of wood as to actual weight and shrinkage in the wood room at the different manipulations.

In most cases the digester room does not know what is received from the wood room. A weighing device seems, therefore, to be of great value to determine the amount of chips received. Also, the grade of chips received is of great importance. A very uniform chip is not always desirable but a screen checking test of the chips is a good policy. The digester should be filled to capacity and chips packed in to a certain degree for best efficiency of digester. On the other hand, packing them too hard will slow up circulation but this has only been the case where mechanical filling devices have been used. The filling of the digesters is important as a certain amount of chemicals are used for digestion.

The cooking liquor is quite a mixture when it comes to sulphate pulp. There are practically only three ingredients that are active, namely, hydrogen sulphide, sodium sulphide and sodium hydroxide. The rest is carried around as a ballast. The ideal liquor would be a liquor with only these three ingredients but this is not possible on account of the raw material used which is sodium sulphate. In the process touching only the main changes, the cooking liquor used as a solvent, takes up more than 50 per cent of the wood. Sodium goes over to carbonates, the raw material to sulphide, a small amount of sulphite and part is unreduced. Cooking time and steam pressure are to be controlled accurately as having important bearing on efficiency. The following three factors are very definitely related to each other, namely, amount of chemicals, time of digesters and steam pressure. If one of these items is decreased the other has to be increased. What changes are best depend on local conditions. The failure of the digester to blow clean has also a considerable effect on efficiency. The moisture in the chips also has a great bearing on the process as a percent more moisture would tend to dilute the liquor and would have to be taken care of.

CONTROL—Check on weight, grade and quality of chips. Filling of digester. Moisture content of chips. Laboratory test on quality of pulp. Steam consumption.

The chemicals are recovered by evaporation and the process losses made up by adding sodium sulphate to ash which is reduced to sulphide in fusing. The organic material will, in most cases, be sufficient to accomplish this process of reduction. There are many things that will affect the efficiency of this process. To get the necessary temperature for reduction, blowers are used. The temperature is obtained by the volume of air and pressure induced in furnace. The performance of the furnace as to quantity and quality is in proportion to the same. A forced furnace will, of course, produce more and the quality will be good but the efficiency will suffer as volatilization will be so much higher and the flue gas losses will be high.

* Delivered at the Convention of the Cost Association of the Paper Industry, Wausau, Wis., Sept. 19, 1929.

[1] Chief Chemist, Mosinee Paper Mills, Mosinee, Wis.

For evaporating the water in nearly all mills multiple effect evaporators of one kind or another are used. If the evaporator is not carefully taken care of, a considerable loss may occur there on account of foaming.

The recovery room is one of the hardest places to keep under control at present as the losses are difficult to determine and to find remedies for as, in most cases, the furnaces are very forced.

CONTROL—Check made on evaporator losses, air pressure on nozzles, amount of air induced and flue gas determinations in regard to solids and sulphur gas.

Causticizing Room

After the dissolved smelt from furnaces has been pumped over to the causticizers at a certain degree Be the lime is added. The degree of causticity is dependent on the lime, temperature and concentration of liquor. The concentration of the liquor is mostly dependent on cooking methods. The lime quality has to be up to standard as to settling and efficiency. A very high grade of calcium lime is necessary and a clean lime chemically is good but not essential. The best lime is the lime that for efficiency in actual mill run gives best results and settles to a small volume. A voluminous sludge will not allow so much clear liquor to be drawn off, is harder to wash and many times harder to filter. The amount of lime for causticizing is determined practically and efficiently figured out from the amount of sodium carbonate in the green liquor actually causticized in the white liquor.

CONTROL—Check made on strength of liquor pumped over to causticizer and content of carbonate. Chemical and physical characteristics found in lime and efficiency in practical use.

Washing of Pulp

This is most always done in diffusers and not so much in open tanks or filters. If the pulp, when it leaves the diffuser, is not well washed it will cause quite a little trouble in the paper mill and there will also be considerable loss of chemicals. Hot water is essential for a good wash and also the cycle of washing has to be controlled to break off the black liquor at the right point for recovery and washover.

CONTROL—Check made on strength of black liquor for recovery room and also on wash water, temperature and pressure. Content of chemical in pulp and water dumped from diffusers. Laboratory test on quality of pulp. Check on screenings and cleanliness of pulp.

Beater Room

Where a paper mill works in conjunction with a pulp mill the stock is pumped to the beater in slush form and so a continuous check on yield is difficult and shrinkage in paper mill difficult to calculate. Where the pulp is used in lap form the calculations are simplified. A loss of pulp in beaters will hardly take place except in beaters where washers are used in which case the white water has to be tested for fibre loss. In beater sizing, the most practical size has to be found as to quality in regard to free rosin and emulsion. By setting the size the least amount of alum has to be found. This is depending on local conditions. Some have to use more than others. The beating of the stock is the most important work in the beater room and is controlled by the performance on the paper machines.

The beater engineer is in constant touch with the machine tenders to regulate his beating engines to give the stock the proper treatment for the paper machines to meet conditions there for special requirements of paper.

CONTROL—Checking of temperature of stock from beating engines as means of determining the work. If driven by separate motors checking of power used. Check on rosin size as to free and combined rosin and grade of emulsification. Check on alum as to aluminum sulphate and moisture. Checking on consistency of stock in beater. If colors used, check on efficiency of colors. Check on beater and jordan fillings for best size of bars and most durable.

COST SECTION

Paper Machines

The most expensive parts to replace on the paper machines are the wires and felts. Everything that can be done to reduce wear and tear on these is well paid for. Of course, there are also the moving parts, transmissions, clutches, belts and so forth that will cause losses if not inspected and critical points detected before an inconvenient shut down for repairs is necessary. Well lined table rolls without flat surfaces, free moving, automatic guide roll for wires and felts, strong non-flexible roll for spanrolls and carrying rolls well surfaced suction boxes without excess suction, covered with a good material so that wear on the same is even and not forming ridges and other unevennesses. Press rolls in good shape with right crown whereby an efficient pressure can be maintained, and so reduce steam consumption for the following drying of paper. Efficient felt washers, dryers free from water, that is, a good system for separating the steam from water at the different passes. The paper not over-dried thereby using steam most efficiently and not impairing the strength of paper and adding to weight and also recovering the heat in the offgoing vapors from the dryers which can be utilized in several ways. A good way is to heat up ingoing air to machine room. The calender stack in good condition as to rolls. White water used over as much as possible thereby reducing losses in fibre and saving of power for pumping fresh water at the same time having, in many cases, a clearer water. Overflow tested for fibre losses and the fibres recovered. White water also tested for acidity and alum controlled according to test. Paper tested for size and also for physical tests. Water flow to wire regulated for best formation and test of sheet at the same time running the machine at highest speed without impairing the quality and characteristics of the paper to be made so that specifications can be met. In changes the ways and means are found whereby the least possible time loss occurs and the least possible amount of stock going over wet end. Means of recovering highest amount of wet stock from wire and presses. All trimmings are taken care of as soon as possible and worked up in integrating machines or beaters so that impurities in the form of oil and dirt have the least possibilities of getting into the broke and so the prepared broke be returned without any difficulty to the stock.

CONTROL—Check as to efficiency of screens, wires and felts, wet and dry. Check on condition of Fourdrinier and as to table rolls, guide roll carrying rolls, suction boxes as to surface and level. Check on press rolls of crown and hardness. Check on dryers so that all have a clean surface. Check on transmissions. Checking of all sewers for fibre loss.

There are, of course, many other finer points in the control but as most of them are of local character it is not possible to tabulate them all. They have to be arrived at by adjustment and the points of interest, I believe, best taken up individually and discussed.

In conclusion, will say, that for an effective control registering apparatus and instruments are necessary and the common pressure gauge is not the only instrument necessary to help the technical man draw his conclusions.

Japanese Paper Production

WASHINGTON, D. C., October 23, 1929.—Production by the mills of the Japanese Paper Manufacturers' Association during the month of July totaled 59,820 short tons and sales 54,908 tons, bringing the total for the first 7 months of the year up to 413,246 tons and 400,693 tons respectively. Production and sales during the corresponding 7 months last year totaled 326,731 tons and 320,629 tons. During the month of August the mills manufactured 20,821 tons of chemical pulp and 20,576 tons of mechanical pulp, while purchases amounted to 7,087 tons and 552 tons respectively. The mills consumed during August 4,936,650 cubic feet of lumber, 951 short tons of rags, 552 tons of straw, and 2,800 tons of waste paper.

Should Depreciation Rates Be Standardized In the Pulp and Paper Industry?*

By Frank W. Jackson[1]

The consideration of standardized rates of depreciation for the pulp and paper, or any other industry, is a much mooted question. It has been our experience that, after a discussion of fundamentals governing depreciation, we can find as many different opinions as there are individuals who give these questions real thought. I was recently discussing the question of proper rates of depreciation with an executive of a paper company which maintained an unusually progressive policy on property replacements. This gentleman claimed that his paper machines should have been depreciated at the rate of 10 per cent per year, and knowing these machines to be in excess of 20 years old at the time of our discussion, I could not help but feel that his attitude was unsound. He later made the statement, contrary to generally accepted depreciation practices, that he knew his machines were in excess of 20 years old but the directors of their company had considered them to be a liability for the past 10 years and if finances had permitted they would have been replaced long ago.

Study Pulp and Paper Industry

The Commissioner of Internal Revenue has recently arranged for a study of depreciation rates in various industries for the purpose of standardization. Among the first in which such rates have been tentatively published is the pulp and paper industry. Papers prepared by the Commissioner of Internal Revenue and his representatives on this question indicate the care and logical thought under which these studies are being made. The comments which will be presented in this paper recognize the sound basic principles followed by the Commissioner of Internal Revenue and offers such suggestions as appear pertinent in line with the experience which we in the appraisal profession have had in our consideration of depreciation in the valuation of pulp and paper properties as well as many other types of industry.

Depreciation is well defined in the Federal Revenue Act and rulings as the gradual exhaustion of the usefulness of property employed in trade or business, such exhaustion comprising wear and tear, decay or decline from natural causes and various forms of obsolescence, such as are attributable to the normal progress of the art, inadequacy to the growing needs of business and the necessity of replacements by new inventions. Losses resulting from all phases of depreciation are a proper part of production costs. Mr. John D. Montague has aptly stated in the August issue of Connecticut Industry that "plant investment is nothing more than a deferred operating cost, awaiting a chance to find its way as a part of the cost of the products issuing from the plant." It is generally recognized that depreciation losses should be spread over the useful life of the property units and should be equitably distributed in proportion to the usefulness of the property during the various periods of its life.

The standardization of rates of depreciation is so closely allied with accounting for federal tax requirements that we will not discuss the question whether the depreciation reserve should be designed simply to recover the cost of the property or whether it should serve the more practical usage, from the business standpoint, of providing for the replacement of the property itself upon the basis of the present market prices for buildings and equipment.

Wear and Tear

Standardized rates of depreciation necessitate an analysis of the important elements contributing to depreciation losses. Wear and tear is probably the most evident form of depreciation though possibly having the least ultimate effect upon property losses as a result of the offsetting maintenance and renewals. Obsolescence may be divided into ordinary obsolescence resulting from the gradual changes occurring in the progress of the art, provision for which is usually made through depreciation allowances, and extraordinary obsolescence resulting from radical and unusual changes in the design or use of productive equipment, losses for which are taken as they occur. I wish to further segregate that part of ordinary obsolescence which may be termed as lack of utility. A machine may be the best on the market for the purpose for which it was designed and as a machine no obsolescence exists, but because of a change in the product or policy of a company that machine may lose its utility as a part of that company's plant and its value becomes measured by the second-hand market for equipment of that character.

Wear and tear as an element of depreciation requires a definite standardization in the policy of accounting for maintenance and renewals. The general principle that repairs be expensed, which neither materially add to the value of the property nor appreciably prolong its life is unquestionably sound. However, the life expectancy of the property is dependent upon the maintenance policy and should be increased or decreased in accordance with the point at which costs are considered as maintenance and expenses or as renewals and debited to the depreciation reserve. The greater the accounting of renewals as a part of maintenance expense, the longer the life expectancy, and as a greater proportion of maintenance and renewal costs are accounted as debits to the depreciation reserve, the life expectancy should be shortened, to be extended when and as such renewals are made.

Maintenance and Renewals

It is relatively simple to provide a standardized basis for the consideration of maintenance and renewals and where this standard is set the life expectancy of property as affected by wear and tear, may be reasonably fixed. Schedules of the various types and classifications of equipment can be prepared and the specifications established to determine the character of costs which should be capitalized, debited to the depreciation reserve, and expensed, respectively. Such specifications are a necessary requisite to the standardization of depreciation rates and are desirable for sound property accounting. A uniformity of practice, with such specifications, is made possible which is seldom obtained when the accounting for each expenditure is decided as an individual case.

The effect which obsolescence may have upon the life of equipment is generally segregated between that gradual and ordinary obsolescence resulting from progress of the art as compared with the immediate specific obsolescence resulting from a radical change in the type and character of equipment and methods of production. Ordinary obsolescence is usually provided for through consideration of the life expectancy of property and the resultant annual rates of depreciation. Specific obsolescence occurs with such rapidity and its results are so unexpected as to prohibit a reasonable basis for anticipating its occurrence and ordinarily property accounting does not attempt to anticipate such losses through depreciation deductions. We have just read of the new Millspaugh paper machine which has various innovations that are claimed to permit the machine to operate safely at double the speed of the fastest machine of today. The success of such a

* Delivered at the convention of the Cost Association of the Paper Industry, Wausau, Wis., Sept. 19, 1929.

[1] American Appraisal Co., Milwaukee, Wis.

machine presents a serious problem for paper mill executives and engineers and may be an excellent example of specific obsolescence.

Associated Equipment

It should be definitely borne in mind that a paper machine of such increased speed does not merely mean the replacement of the machine itself but requires an increased proportion of associated equipment necessary to furnish the greater amount of raw material at the wet end of the machine. A considerable proportion of this associated equipment is of a relatively short life, all of which tends to increase the composite rate of depreciation for the property as a whole. The same situation exists to a proportional extent where paper machines are speeded up, and not only is the increased speed a factor of depreciation in the paper machine itself, but the additional short lived equipment increases the composite rate of depreciation for the property as a whole.

The mere fact that a faster machine is on the market, such as announced by the Millspaugh Company, does not necessarily cause the old machine to lose its utility. I was recently in a large paper mill in the West where I found side by side a 70-inch machine about 50 years old, operating about 90 feet per minute, and a practically new 160-inch machine operating approximately 1,100 feet per minute. The former was producing a very cheap grade of wrapping paper and the latter a high grade of wrapping paper and it was stated by the manufacturer that under the conditions of operation, and for the product produced, each machine was operating economically and upon a profitable basis. The product, policy and plant lay-out are all important points in the consideration of obsolescence as it affects a particular plant.

Unusual Costs Twenty Years Ago

It was the practice for paper mills built some 20 years ago to locate their plants available for direct water power operation of grinders and power units. This requirement necessitated unusual costs for excavation and foundation construction. The development and flexibility of the use of electric power for grinder operation has made economical the provision of motor driven grinders and today many plants are discontinuing their turbines and installing motor grinding equipment. It is obvious that if these plants were to be rebuilt today, a hydro-electric power unit would be installed available to the water power and the paper manufacturing unit would be located advantageously for paper mill operation. This would eliminate to that extent the unusual excavation and foundation costs necessary to locate the entire plant as a single unit available for direct connected water power. Our attention was recently called to a property on which there had been expended several hundred thousand dollars for rock excavation necessary to locate the paper mill available for direct connected water power usage. This plant is now installing electric motor driven grinders replacing the turbines which are either being used for electric power production or are being replaced by more economical units for power production.

The accruing obsolescence of this character has been gradual and even today motor driven grinders may not necessarily be an advantageous plant layout for all properties and conditions. This type of ordinary obsolescence should be provided for through depreciation and is a necessary element for consideration in the standardization of depreciation rates.

Registration of Changes

It has been stated that progress demands change, and obsolescence is simply the registration of such change. Standardized rates of depreciation should profit by the experience of such changes and should be sufficient to adequately provide for the recovery of cost during the useful life of the property.

The segregated form of obsolescence, which I have termed previously as "lack of utility," presents a problem peculiar to each plant and comparative only where conditions are exactly similar, both in plant operation and product manufactured. A machine may be the best engineered equipment on the market and because of the conditions at an individual plant may have lost either a part or the whole of its usefulness and would be subject to disposal in accordance with the second-hand market for such equipment. A plant producing automobile accessories recently presented evidence that lathes had a life of not in excess of 7 years and were able to demonstrate by the life of lathes at their particular plant that 7 years was approximately correct. A further investigation of this condition indicated that the refinement of accuracy for the product at that plant was the limiting factor rather than the useful life of the lathes themselves. A plant requiring less accuracy in its product could use the lathes at the end of the 7 years but at that time they had become second hand equipment and in piecemeal sale were of value only to that extent. A loss was incurred due to the lack of utility of the lathes at that plant and the inability to dispose of them on the second-hand market at a price consistent with the remaining utility of the lathes under average conditions.

Wide fluctuations should be anticipated in the life expectancy for similar types of equipment in accordance with the product manufactured. The manufacturer of writing paper, wrapping paper, book paper, news print and specialty paper, each has different problems and the analysis of depreciation for each results in varying conclusions.

The usual accounting methods for providing depreciation deductions are based upon the expectancy of life of the property units generally averaged by accounts or for the property as a whole. This expectancy of life forms the basis for spreading the amount recoverable as depreciation by use of varying accounting methods such as, through the amortization of the capital sum in equal annual installments; through the reducing balance basis; through the sinking fund basis; through a production unit basis or by means of methods designed to meet the particular needs of property accounting.

Straight Line Method of Depreciation

One of the simplest methods of accruing depreciation, and the method usually followed by the Bureau of Internal Revenue, is the so-called straight line method of depreciation in which the capital sum is amortized in equal annual installments over its useful life. For purposes of accounting and cost finding this method serves a simple and useful basis for depreciation.

The use of straight line depreciation seldom establishes the actual value of equipment. It is possible that wear and tear and offsetting maintenance follow reasonably closely the straight line basis of depreciation, however, renewals and extraordinary maintenance tend to extend the expected life of equipment and distort the actual application of straight line depreciation as an indication of value. Ordinary obsolescence and lack of utility, provided for in depreciation rates, seldom accrue rateably although it may occur periodically during the life of property. Actual value considers the condition of the property and its remaining expectancy of useful life as indicated by that condition and the extent to which obsolescence and lack of utility actually has occurred at any specific time, and does not assume a rateable accrual of depreciation.

The determination of standardized rates of depreciation for any industry presents an intricate problem, which should be subject to a careful consideration of all facts necessary to determine the average expectancy of life of major types of equipment. Careful consideration should be given to the fluctuation in the life expectancy of property in accordance with the policy of renewals and replacements considered adequate in the property accounting in each case. The economic market for the product should be carefully studied and the utility of the property to profitably meet the requirements of the market all tend to control the useful life of the property units as parts of the going concern.

History of Machines Useful

Examples may be cited of paper machines which have been discarded at the end of some 10 years life, and on the other hand there are many examples of paper machines operating today after a useful life in excess of 50 years. Such a fluctuation in useful

life of a single type of equipment makes apparent the necessity for careful consideration of standardized rates of depreciation in any industry. The history of renewals and changes in the long-lifed machines and the policy of the company and economic conditions causing the termination or short-lifed machines should be carefully investigated. Observed depreciation divided by expired life is seldom a basis upon which depreciation rates can be adequately established as such rates would provide only for the wear and tear and ordinary obsolescence including lack of utility which had occurred to the time of the depreciation of the observed depreciation and this further would be of little value except as the renewals contemplated as capital or debits to the depreciation reserve were considered in determining the expired life.

There are many pitfalls in the determination of standardized rates of depreciation and it is our opinion that in the final analysis such rates should be established in accordance with the results of carefully analyzed judgment and experience in the life expectancy of all important types of property, and not through an attempt to use mathematical computations or through an analysis of expired life of property except where such analysis considers the entire history of the operating property. It is further our opinion that a wide range should be permitted in applying standardized rates of depreciation to specific properties to provide for the widely varying policy of companies in their treatment of obsolescence and lack of utility and the competitive production requirements under existing market conditions at each property.

We believe that through the exercise of good judgment, standardized depreciation rates can be reasonably and quite definitely established for comparable properties. Such standardized rates can be established for various items or types of equipment under given conditions of usage and production policy. An analysis of the property investment permits the distribution of that investment to those various items or units of property and a determination of a weighted average or composite rate of depreciation by departmental divisions or accounts will provide a basis for establishing and carrying forward a depreciation reserve in accordance with the facts at each individual plant and upon a simple and yet complete system of property accounting which has the accuracy of item depreciation combined with the simple flexibility of the use of composite rates of depreciation. The application of a weighted average rate permits of the detail accounting of depreciation adjustment for property deductions in accordance with the item rates applicable to each type of property deducted without the clerical detail of the continued use of such depreciation methods applied to all property units.

We endorse the policy of the Commissioner of Internal Revenue in attempting the standardization of depreciation rates and we commend the action of your association and other industrial associations in their cooperation with the Commissioner in this undertaking. Any movement which emphasizes the importance of depreciation is a forward step. We believe that if standardized rates of depreciation are properly established in accordance with sound judgment and carefully analyzed facts, and if the application of these rates to the particular requirements of each manufacturing company is not too strictly limited to prohibit the variation resulting from the policy of individual companies and requirements of the market, that benefits will be obtained by the pulp and paper industry through adequate property control and recovery of property costs upon a basis necessary to insure a stabilized maintenance of property investment.

Oswegatchie Paper Co. To Reopen

GOUVERNEUR, N. Y., November 2, 1929.—It is rumored that the Oswegatchie Paper Company will reopen its plant at Natural Dam in the near future and it is also said that new orders received will permit near capacity operations during the entire winter. Officials of the plant would not verify the report. The plant employs a large working force and the suspension of operations recently was a severe blow to the merchants in this vicinity.

Massachusetts Industries Exposition

BOSTON, Mass., October 28, 1929.—At the exposition of the Associated Industries of Massachusetts at the Copley-Plaza Hotel three firms manufacturing paper showed displays.

The American Writing Paper Company, Holyoke, Mass., demonstrated the Complete Standardization Service. This service illustrated how to make studies of the paper problems of the users of paper, an educational work to show what paper is, what it will do, and how simplifying the use of paper is cutting out the waste in the use of paper. The exhibit was in charge of John A. Owen, assistant director of the Paper Users' Standardization Bureau.

The Strathmore Paper Company, Mittineague, Mass., displayed the different lines of the company for printers and stationery. Envelopes to match every item of paper made by this firm were featured. The exhibit was in charge of Sheldon Bradley, sales promotion manager.

The Tileston & Hollingsworth Co., Boston, demonstrated their old-fashioned papers and also the new. They also featured colors in broadsides. Three Crinoline Girls, Mrs. Helen Henderson, Miss Doris Hodges, and Miss Martha Cooper, the first two in old-fashioned costume and the third in modern dress, took part in the display. A new sample book, showing all the papers made by the company, was a prominent feature. Colors on broadsides were also shown. The exhibit was in charge of A. V. Howland, vice-president and assistant treasurer; Howard Wallingford, assistant to Mr. Howland; Charles S. Trefry, sales manager for New England; and Marvin Campbell.

The Plymouth Cordage Company showed their hard fiber Java twine, bailing twine, binder twine, the "Plymouth Red Top," manila cords and tying twines. The exhibit was in charge of R. S. Bailey and F. A. Jenks, of the sales department.

Benjamin A. Franklin, vice president of the Strathmore Paper Company, was elected president of the Associated Industries of Massachusetts, Inc., succeeding Col. Frederick H. Payne, of the Greenfield Tap and Die Corporation, at the annual meeting at the Copley-Plaza Hotel, October 23. There was no contest. B. Preston Clark, vice president, Plymouth Cordage Company, North Plymouth, Mass., was elected a member of the executive committee.

Work of the Import Committee

The efforts of importers of envelopes used for the lithographed greeting cards and similar lithographed merchandise to import such envelopes free of duty were the subject of a test case before the United States Customs Court last month. The importers claimed that the envelopes were free of duty as containers of lithographed merchandise, under a proviso of the Tariff Law for free admission of such containers. The Import Committee, however, cooperated with the Government by securing witnesses who testified that the envelopes were ordinary commercial envelopes, could be used for any purpose for which envelopes are used for mailing, and therefore they should not come under the provision for containers. The case was a test of this issue involving hundreds of importations.

Several important court decisions sustaining the contentions of the Import Committee have been rendered recently. Among them are:

Manila side runs held to be dutiable, not free of duty as standard news print as claimed by importer.

Efforts of a Baltimore importer to secure free entry of pulp board under the claim that it was duty free as pulp were overruled by the decision of the United States Customs Court that the shipment was dutiable as pulp board at 10 per cent.

Importers who had protested to the Customs Court against ruling by customs officials adverse to their contentions have finally abandoned cases involving the classification of book paper claimed to be standard news print, photographic paper, and writing paper held to be subject to an additional duty because of fancy finish.

COST SECTION

Obituary

Daniel M. Shartle

MIDDLETOWN, Ohio, November 4, 1929.—Daniel M. Shartle, who was well known by the papermakers of the past generation throughout the country, died at Middletown, October 16, aged 72 years.

Mr. Shartle was born July 16, 1857, at Rockland Mills, Wilmington, Del.

He was the son of John and Jane Dunn Shartle and the brother of John M., Charles W., Robert A., Thomas I., Francis T. Shartle and of Mrs. Christine Shartle Birrell.

Mr. Shartle came from a family of paper makers. On his father's side the family have been engaged in the industry for more than a century and on his mother's side for more than three centuries.

Mrs. Herbert S. Brown

TROY, Ohio, November 4, 1929.—Mrs. Herbert S. Brown, wife of Herbert S. Brown, secretary of the Brown-Bridge Mills, of Troy, Ohio, lost her life in an automobile accident on Saturday, October 26.

She was driving alone from Robinson, Ill., the home of her parents, to Chicago to meet Mr. Brown, near Watseka, Ill., when she lost control of the car, due to running off the edge of the concrete. The car turned over several times and death came instantaneously.

The funeral was held on Tuesday, October 29, at Mattoon, Ill., and was largely attended. Many floral offerings was eloquent tribute to the love of a host of friends.

Frank L. Wood

[FROM OUR REGULAR CORRESPONDENT]

FELT MILLS, November 4, 1929.—Frank L. Wood, superintendent of the wood department of the Sherman Paper Company in the early days of the company, died during the past week at his home here. He was 68 years old and had remained in the employ of the company until two years ago when failing health caused him to retire. He had resided in this section virtually his entire life and was prominently identified with municipal affairs. He is survived by two daughters, a son and eight grandchildren.

Miss Katherine H. Pelissier

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., November 5, 1929.—Miss Katherine H. Pelissier of 4 Brooks avenue, assistant purchasing agent for the American Writing Paper Company, Inc., died last week at the home of her sister, Mrs. A. B. Ferguson of 26 Belvidere avenue. The funeral was held at her sister's home followed by high requiem mass at the Holy Cross church and burial was in Northampton.

American Writing Makes Good Report

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., November 2, 1929.—Maintenance of the consistent increases in earnings that have characterized the record of the American Writing Paper Company since its reorganization in 1927 is reflected in the company's financial statement for the first nine months of 1929, released today. The statement shows an increase in earnings for the nine months ended September 30, 1929, of 20 per cent as compared with the same period of 1928.

The net earnings for the first nine months of 1929 after deducting Federal taxes, were $293,314.14, and for the first nine months of 1928, $241,839.70. An interesting feature of the company's record is that earnings for the nine months ended September 30, 1929, exceeded those of the entire year 1928, when profits totaled $277,993.81 after Federal taxes.

Commenting upon the statement, Sidney L. Willson, president of the American Writing Paper Company, said:

"The dividend obligations on the preferred stock of $3.00 per share for the year 1929 amount to $270,000; for the nine months represented by this statement, $202,500, leaving a surplus balance for the nine months above preferred dividend obligations of $90,814.14, or 45 cents per share on the common stock.

"The net sales for the nine months' period to September 30, 1929, were $9,201,729, as compared with $9,414,139 in 1928. While the sales have decreased 2 1/3 per cent, there has been an increase in the net profits earned, of 20 per cent.

"The company is in a favorable position, with reference to orders on hand and the last quarter's operations should add materially to the results already shown."

BALANCE SHEET, SEPTEMBER 30, 1929

ASSETS			
Current Assets			
Cash			$1,356,921.99
Notes and acceptances			182,305.99
Accounts receivable		$1,148,960.47	
Less: Reserves		108,617.17	1,040,350.30
Inventories at cost, or market if lower			2,068,615.28
Total Current			4,648,193.56
Plants and equipment		19,237,989.32	
Less: Reserve for depreciation		7,715,828.28	11,522,161.04
Net amount realizable through reorganization and on sale of assets			407,598.22
Investments			10,002.00
Prepaid expenses			67,516.28
Other deferred assets			13,537.85
Payable on common stock in escrow for options			66,750.00
Trade marks, etc.			1.00
			$16,735,759.95
LIABILITIES			
Current Liabilities			
Accounts payable			386,087.33
Dividends payable			67,500.00
Accrued accounts			283,136.53
Total Current			736,723.86
Reserve for Federal taxes			59,073.87
First mortgage 6 per cent gold bonds (due January, 1947)			
Authorized and issued		5,500,000.00	
Less: In treasury		34,000.00	5,466,000.00
Serial notes		700,000.00	
Less: In treasury		90,000.00	610,000.00
Capital Stock			
Preferred (no par value)			
Authorized and issued			
(Voting trust certificates)	90,000 shares		
Less: In treasury	734 shares		
Outstanding	89,266 shares		
Common stock (no par value)			
Authorized and issued			
(Voting trust certificates)	200,000 shares		
Less: In treasury	2,747		
Less: In escrow for options	9,175	11,922 shares	
Outstanding	188,078 shares		$9,345,322.33
Earnings year 1927— Net	$149,831.94		
Earnings year 1928— Net	277,993.81	$427,825.75	
Less: Dividends declared in 1929	202,500.00	$225,325.75	
Gross Earnings 9 months to Sept. 30, 1929			
Less: Interest on funded debt	264,270.00		
Net profit before Federal taxes	333,311.53		
Less: Reserve for Federal taxes	39,997.39	293,314.14	518,639.89
			$16,735,759.95

Group Bonus as a Wage Incentive

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., November 5, 1929.—The principal speaker at the October meeting of the Connecticut Valley Branch of the Cost Association of the Paper Industry Wednesday night at the Hotel Nonotuck was George L. Sprague of the American Writing Paper Company, Inc., whose subject was "Group Bonus as a Wage Incentive." John F. Connor presided and representatives from a number of mills in Western Massachusetts attended.

THE NEW FLATHER MACHINE

of Nashua, New Hampshire, for

Waxing - Oiling - Coating

and

Saturating

is guaranteed to give you the best finish, biggest production, least trouble and most satisfaction of any equipment on the market today.

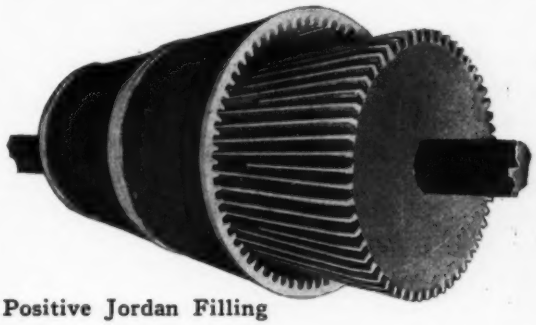
Let us prove it to you.

Gibbs-Brower Co., Inc.
Sole Agents
261 Broadway, New York City

The result of more than 75 years' experience, Tycos Thermometers have long been an accepted standard of rugged construction, ease of reading, and permanence.
Tycos Industrial Thermometers for Paper Plants include a variety of types to meet every standard or special application where direct readings can be taken.
Catalog sent on request.
Taylor Instrument Companies
ROCHESTER, N. Y., U. S. A.
Canadian Plant
Tycos Building
Toronto
Manufacturing Distributors in Great Britain
Short & Mason, Ltd., London

The SIXTH SENSE of Industry

Tycos Temperature Instruments
INDICATING RECORDING CONTROLLING



Positive Jordan Filling

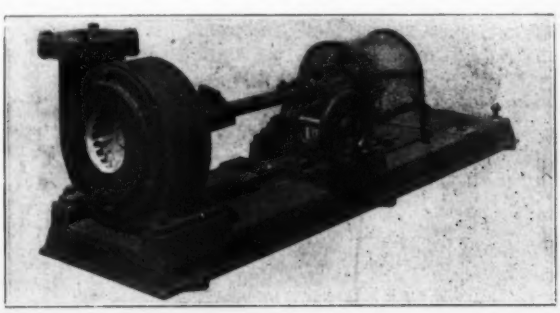
STOP

Old man Bahr says:

In order to meet the keen competition existing in the mills of today, use the Bahr Positive Improved Jordan Filling to prepare your stock "for capacity", the lowest first cost, and longest life of service.

Manufactured by THE BAHR BROTHERS' MFG. CO.,
MARION, INDIANA, U. S. A.

Trade Mark	Cable Address
POSITIVE	POSITIVE
Reg. U. S. Pat. Off.	Western Union Code



Bahr Centrifugal Refiner

Built for belt drive, or direct connected.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING NOVEMBER 2, 1929

SUMMARY

Cigarette paper .....33 bls., 220 cs.
Wall paper .....42 bls., 18 cs.
Hangings .....55 bls., 8 cs.
News print .....317 rolls
Printing paper .....28 bls., 111 cs., 85 rolls
Packing paper .....50 cs.
Wrapping .....92 cs.
Condenser tissue .....21 cs.
Silk paper .....16 cs.
Tissue .....100 cs.
Decalcomania .....26 cs.
Colored paper .....29 cs.
Baryta coated paper .....76 cs.
Surface coated paper .....87 cs.
Coated paper .....15 cs.
Photo paper .....9 cs.
Drawing .....58 cs.
Filter .....20 bls., 77 cs.
Transfer .....19 cs.
Writing .....60 cs.
Wax coated paper .....10 cs.
Stencil paper .....89 cs.
Raw paper .....53 cs.
Greaseproof .....16 cs.
Wafer paper .....11 cs.
Straw board .....120 rolls
Miscellaneous paper .....346 cs.

CIGARETTE PAPER

P. J. Schweitzer, Pres. Garfield, Genoa, 158 cs.
Max Spiegel & Son, Pres. Garfield, Genoa, 33 bls.
Liggett & Myers Tobacco Co., Scythia, Liverpool, 50 cs.
Standard Products Corp., Olympic, Southampton, 12 cs.

WALL PAPER

Schmidt & Pritchard, Muenchen, Bremen, 7 bls.
F. J. Emmerich, Adriatic, Liverpool, 5 bls.
F. J. Emmerich, Tuscania, London, 2 bls.
F. J. Emmerich, Cleveland, Hamburg, 8 bls.
J. E. Bernard & Co., Cleveland, Hamburg, 20 bls., 9 cs.
Irving Trust Co., Cleveland, Hamburg, 8 cs.
F. J. Emmerich, Olympic, Southampton, 2 bls.
Universal Car Loading Co., Republic, Bremen, 1 cs.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Adriatic, Liverpool, 40 bls.
A. C. Dodman, Jr., Inc., Scythia, Liverpool, 6 bls.
A. C. Dodman, Jr., Inc., Olympic, Southampton, 2 cs.
W. H. S. Lloyd & Co., Tuscania, London, 9 bls., 3 cs.
Whiting & Patterson Co., Inc., Mauretania, Southampton, 3 cs.

NEWS PRINT

Parsons & Whittemore, Inc., Muenchen, Bremen, 317 rolls.

PRINTING PAPER

C. Steiner, Muenchen, Bremen, 19 cs.
W. Bersch, Muenchen, Bremen, 5 cs.
Keuffel & Esser Co., Cleveland, Hamburg, 85 rolls.
Walker, Goulard, Plehn Co., Cleveland, Hamburg, 21 cs.
——, Cleveland, Hamburg, 25 cs.
E. Dietzgen & Co., N. Amsterdam, Rotterdam, 39 cs.
American Banknote Co., Pres. Garfield, Genoa, 2 cs.
W. A. Foster & Co., Cameronia, Glasgow, 28 bls.

PACKING PAPER

J. P. Heffernan Paper Co., Reliance, Hamburg, 19 cs.
American Express Co., Cleveland, Hamburg, 31 cs.

WRAPPING PAPER

Steffens Jones Co., Lapland, Antwerp, 10 cs.
Sylvania Industrial Corp., Lapland, Antwerp, 68 cs.
Standard Products Corp., Olympic, Southampton, 14 cs.

CONDENSER TISSUE PAPER

Parsons & Whittemore, Inc., Scythia, Liverpool, 21 cs.

SILK PAPER

Meadows, Wye & Co., N. Amsterdam, Rotterdam, 16 cs.

TISSUE PAPER

Old Master Paper & Pulp Co., Reliance, Hamburg, 83 cs.
F. L. Kramer & Co., Tuscania, London, 2 cs.
G. W. Sheldon & Co., American Trader, London, 3 cs.
F. C. Strype, Scythia, Liverpool, 6 cs.
B. F. Drakenfeld & Co., Scythia, Liverpool, 6 cs.

DECALCOMANIA PAPER

G. W. Sheldon & Co., Reliance, Hamburg, 2 cs.
B. F. Drakenfeld & Co., Scythia, Liverpool, 4 cs. (duplex).
B. F. Drakenfeld & Co., Scythia, Liverpool, 14 cs. (simplex).
G. W. Sheldon & Co., Republic, Bremen, 6 cs.

COLORED PAPER

S. Gilbert, Muenchen, Bremen, 9 cs.
E. Hennigson, Muenchen, Bremen, 1 cs.
E. Hennigson, Republic, Bremen, 2 cs.
——, Republic, Bremen, 14 cs.
E. Daiber, Lapland, Antwerp, 3 cs.

BARYTA COATED PAPER

Globe Shipping Co., Muenchen, Bremen, 66 cs.
Globe Shipping Co., Republic, Bremen, 10 cs.

SURFACE COATED PAPER

Syndicate Trading Co., Reliance, Hamburg, 1 cs.
P. H. Petry & Co., N. Amsterdam, Rotterdam, 6 cs.
Gevaert Co. of America, Lapland, Antwerp, 80 cs.

COATED PAPER

Pacific National Bank, Cleveland, Hamburg, 15 cs.

PHOTO PAPER

J. H. Schroeder Banking Corp., Republic, Bremen, 9 cs.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Tuscania, London, 4 cs.
Keuffel & Esser Co., Cleveland, Hamburg, 54 cs.

FILTER PAPER

A. Giese & Son, Thuringia, Hamburg, 4 cs., 5 bls.
H. Reeve Angel & Co., Inc., Tuscania, London, 8 cs.
E. Fougera & Co., Olympic, Southampton, 60 cs.
H. Reeve Angel & Co., Inc., Olympic, Southampton, 15 bls., 5 cs.

TRANSFER PAPER

Hensel, Bruckman & Lorbacher, Thuringia, Hamburg, 19 cs.

WRITING PAPER

Hensel, Bruckman & Lorbacher, Muenchen, Bremen, 9 cs.
Japan Paper Co., Pres. Garfield, Genoa, 33 cs.
Distinctive Writing Paper Co., Olympic, Southampton, 1 cs.
Guibout Freres, Olympic, Southampton, 9 cs.
Globe Shipping Co., Olympic, Southampton, 6 cs.
B. Altman & Co., Olympic, Southampton, 1 cs.
Guibout Freres, Mauretania, Southampton, 1 cs.

WAX COATED PAPER

Guaranty Trust Co., Muenchen, Bremen, 10 cs.

STENCIL PAPER, ETC.

Arlac Dry Stencil Co., Reliance, Hamburg, 89 cs.

RAW PAPER

American Express Co., Cleveland, Hamburg, 53 cs.

TRANSPARENT GREASEPROOF PAPER

Central Hanover Bank & Trust Co., Cleveland, Hamburg, 16 cs.

WAFER PAPER

W. L. Haas, N. Amsterdam, Rotterdam, 11 cs.

STRAW BOARD

Hensel, Bruckman & Lorbacher, N. Amsterdam, Rotterdam, 120 rolls.

MISCELLANEOUS PAPER

P. C. Zuhlke, Lapland, Antwerp, 2 cs.
American Express Co., Cleveland, Hamburg, 47 cs.
J. J. Shore, Cleveland, Hamburg, 15 cs.
Globe Shipping Co., N. Amsterdam, Rotterdam, 101 cs.
Van Oppen & Co., Pres. Garfield, Genoa, 99 cs.
——, Pres. Garfield, Genoa, 50 cs.
Japan Paper Co., Olympic, Southampton, 24 cs.
Hensel, Bruckman & Lorbacher, Republic, Bremen, 8 cs.

RAGS, BAGGINGS, ETC.

A. W. Fenton, Inc., Muenchen, Bremen, 64 bls. rags.
F. Stern, Muenchen, Bremen, 44 bls. rags.
Anglo South American Trust Co., Muenchen, Bremen, 70 bls. jute card waste.
E. J. Keller Co., Inc., Muenchen, ——, 17 bls. rags.
Central Hanover Bank & Trust Co., Thuringia, Hamburg, 14 bls. rags.
Amtorg Trading Co., Thuringia, Hamburg, 1,118 bls. rags.
Equitable Trust Co., Thuringia, Hamburg, 335 bls. rags, 17 bls. flax ends.
A. W. Fenton, Inc., Thuringia, Hamburg, 20 bls. rags.
J. Cohen & Son Co., Scythia, Liverpool, 41 bls. rags.
M. Snedeker Corp., Scythia, Liverpool, 109 bls. paper stock.
Gallagher & Ascher, Tuscania, London, 39 bls. rags.
E. J. Keller Co., Inc., Lepanto, ——, 120 bls. flax waste.
Castle & Overton, Inc., Lepanto, Antwerp, 295 bls. rags.
Darmstadt, Scott & Courtney, Lepanto, Antwerp, 78 bls. flax waste.
Royal Manfg. Co., Lepanto, Antwerp, 75 bls. cotton waste.
D. M. Hicks, Inc., Lepanto, Antwerp, 50 bls. flax waste.
Equitable Trust Co., Lepanto, Antwep, 100 bls. flax waste.
Whaleng Waste Products Co., Lepanto, Antwerp, 56 bls. cotton waste.
G. W. Millar & Co., Lepanto, Newcastle, 50 bls. rags.
G. W. Millar & Co., Cabo Villano, Genoa, 30 bls. thread waste.
Royal Manfg. Co., Cabo Villano, Genoa, 88 bls. cotton waste.
Banco Com'l Italiane Trust Co., Cabo Villano, Genoa, 27 bls. paper stock.
Darmstadt, Scott & Courtney, Cabo Villano, Genoa, 94 bls. bagging.
Banco Com'l Italiane Trust Co., Cabo Villano, Leghorn, 217 bls. rags.
S. Birkenstein & Sons, Cabo Villano, Barcelona, 49 bls. rags, 167 bls. bagging.
Brown Bros. & Co., Winona County, Manchester, 143 bls. rags.
Castle & Overton, Inc., Winona County, Manchester, 51 bls. bagging, 43 bls. rags.
Leigh Textile Co., Winona County, Manchester, 235 bls. cotton waste.
Banco Com'l Italiane Trust Co., Hinnoy, Barcelona, 82 bls. baggings, 109 bls. rags.
W. Schall & Co., Hinnoy, Barcelona, 206 bls. rags.
G. W. Millar & Co., Hinnoy, Barcelona, 155 bls. rags.
Anglo South American Trust Co., Adriatic, Liverpool, 43 bls. bagging.
Amtorg Trading Co., United States, Copenhagen, 260 bls. rags.
Equitable Tust Co., United States, Copenhagen, 2,260 bls. rags.
Manufacturers Trust Co., United States, Copenhagen, 264 bls. rags.
Equitable Trust Co., Cleveland, Hamburg, 520 bls. rags.
Irving Trust Co., N. Amsterdam, Rotterdam, 37 bls. canvas.
Van Oppen & Co., N. Amsterdam, Rotterdam, 32 bls. paper stock.
E. Mayer, N. Amsterdam, Rotterdam, 3 bls. rags.
Brown Bros. & Co., Cameronia, Glasgow, 87 bls. rags.
Castle & Overton, Inc., Cameronia, Glasgow, 115 bls. rags
C. R. Spence & Co., Cameronia, Glasgow, 67 bls. rags.
Perry Ryer & Co., Cameronia, Glasgow, 84 bls. rags.
French American Banking Corp., Excello, Genoa, 80 bls. rags.
Mutnick Bros., West Eldara, Antwerp, 83 bls. rags.
V. Galaup, West Eldara, Antwerp, 30 bls. rags.
E. Mayer, West Eldara, Antwerp, 5 bls. rags.
W. Schall & Co., Republic, Bremen, 103 bls. bagging.

OLD ROPE

Brown Bros. & Co., Thuringia, Hamburg, 50 bls.
French American Banking Corp., Cabo Villano, Marseilles, 27 coils.
N. E. Berzen, Cabo Villano, Marseilles, 49 coils.
N. E. Berzen, Cabo Villano, Barcelona, 208 coils.
R. N. Gray, Inc., Winona County, Manchester, 25 coils.
Anglo South American Trust Co., Adriatic, Liverpool, 108 coils.
W. Steck & Co., N. Amsterdam, Rotterdam, 48 coils.

(Continued on page 78)

Starch—

A SIMPLE change in the manufacturing process often results in a pronounced decrease in cost of production.

Paper Mills use Starch for sizing to produce better and stronger sheets with lower cost of manufacture.

Our SPECIAL PAPER brand for beater-sizing increases strength of sheet and gives improved finish.

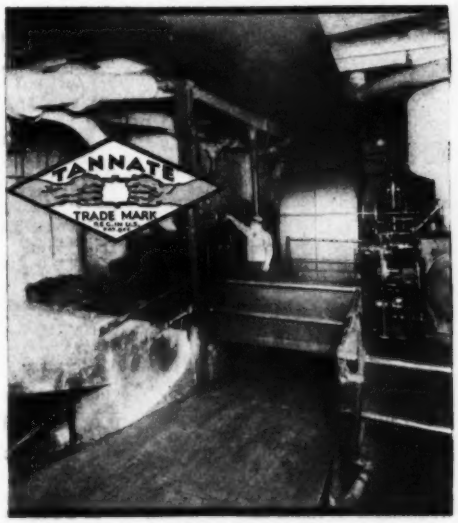
Our FOX HEAD brand for top-sizing is more economical than all glue-size.

CORN PRODUCTS REFINING COMPANY
17 Battery Place, New York City

Your Card in This Space

Will Bring Results

RHOADS TANNATE WATERSHED LEATHER BELTING



This 144' 72" *3-ply* Going Strong and Far Excelling Ordinary 72" *4-ply* Oak Belt in a Big Paper Mill.

THIS belt drives 22 beaters and 3 Jordans. Running at about a mile a minute it transmits 1500 H.P. or more. It replaced a 4-ply oak belt that failed to deliver the required load satisfactorily.

It has been running 23 months, almost continuously. The mill men are greatly pleased with its freedom from slippage under sudden heavy loads.

The engineer declares he "likes the belt very much." One report says, "The engine has not stopped for three weeks and the belt is pulling an awful load." A recent report says that the belt shows no signs of wear.

It pays to invest in Rhoads Tannate Watershed Leather Belting. It is always sold under the Rhoads Service Guarantee, which leaves you to be the judge of whether or not a purchase has proved satisfactory.

Only a superior product could support such a guarantee. Tannate *is* a superior product. Let us supply you with some Tannate Belts for a try-out.

J. E. RHOADS & SON

PHILADELPHIA .....37 N. Sixth St.
NEW YORK .....104 Beekman St.
CHICAGO .....24 N. Clinton St.
ATLANTA .....70 Forsyth St., S. W.
CLEVELAND .....1224 W. Ninth St.
Factory and Tannery, Wilmington, Del.

WOOD PULPS

All Grades

CHICAGO OFFICE:
1460 Conway Building,
111 West Washington St.

Acer, McLernon & Company Limited

CANADA CEMENT BUILDING
MONTREAL, P. Q.

Imports of Paper and Paper Stock

(Continued from page 76)

International Purchasing Co., N. Amsterdam, Rotterdam, 34 coils.
Brown Bros. & Co., Cameronia, Glasgow, 62 coils.

WOOD PULP

Chemical Bank & Trust Co., Thuringia, Hamburg, 506 bls. sulphite, 102 tons.
——, Hallaren, Viborg, 1,194 bls. sulphite.
——, Hallaren, Viborg, 756 bls. sulphate.
——, Cleveland, Hamburg, 365 bls. wood pulp. 73 tons.
——, Bergensfjord, Oslo, 500 bls. wood pulp.
Atterbury Bros., Inc., Bergensfjord, Oslo, 500 bls. wood pulp.
National City Bank, Bergensfjord, Oslo, 1,000 bls. sulphite.
Amtorg Trading Co., Collington, Archangel, 3,080 cords wood pulp.
E. J. Keller Co., Inc., Keifuku Maru, ——, 673 bls. wood pulp.

WOOD FLOUR

State Chemical Co., N. Amsterdam, Rotterdam, 1,200 bags.
B. L. Soberski, N. Amsterdam, Rotterdam, 2,000 bls.
B. L. Soberski, Bergensfjord, Frederickstad, 1,125 bags.

WOOD PULP BOARDS

Lagerloef Trading Co., Hallaren, Kotka, 285 bls.

WOOD PULP WADDING

Birn & Wachenheim, N. Amsterdam, Rotterdam, 50 bls.

CASEIN

Casein Manfg. Co., Sud Americano, Buenos Aires, 504 bags.
T. M. Duche & Sons, Voltaire, Buenos Aires, 417 bags.

PHILADELPHIA IMPORTS

WEEK ENDING NOVEMBER 2, 1929

Southwark Natl. Bank, Isonzo, Leghorn, 30 bls. rags.
M. Friedman, London Exchange, London, 24 bls. paper stock.
Phila. National Bank, London Exchange, London, 291 bls. rags.
Lang Co., London Exchange, London, 236 bls. rags.
A. J. Holman, Excello, Genoa, 17 cs. paper.
Brown Bros. & Co., Excello, Leghorn, 130 bls. glue stock.
Congoleum Nairn Co., Excello, Leghorn, 53 bls. rags.
Guaranty Trust Co., West Eldara, Antwerp, 139 bls. bagging.
Castle & Overton, Inc., West Eldara, Antwerp, 450 bls. rags.
Perkins, Goodwin & Co., West Eldara, Antwerp, 48 cs. printing paper.
Whaling Waste Products Co., West Eldara, Antwerp, 266 bls. jute waste.
S. E. Ingber, West Eldara, Antwerp, 145 bls. rags.
Phila. National Bank, West Eldara, Antwerp, 282 bls. rags.
Willard Hesley, West Eldara, Antwerp, 77 bls. rags.
A. W. Fenton, Inc., West Eldara, Antwerp, 130 bls. bagging.
Tradesman's National Bank, West Eldara, Antwerp, 63 bls. rags.
E. Butterworth & Co., Inc., West Eldara, Antwerp, 105 bls. bagging.
Katzenstein & Keene, Inc., West Eldara, Antwerp, 126 bls. rags.
Castle & Overton, Inc., Tomalva, Holland, 145 bls. rags.
Castle & Overton, Inc., Exchester, Spain, 252 bls. rags.
Castle & Overton, Inc., Bilderdyk, Holland, 510 bls. wood pulp.
Castle & Overton, Inc., ——, Germany, 2,310 bls. wood pulp.
Bulkley, Dunton & Co., Milos, ——, 1,500 bls. wood pulp.
Bulkley, Dunton & Co., Westfalen, ——, 1,250 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING NOVEMBER 2, 1929

T. D. Downing & Co., West Eldara, Antwerp, 22 bls. rags.
S. Godfrey, West Eldara, Antwerp, 16 bls. rags.
E. Butterworth & Co., Inc., West Eldara, Antwerp, 23 bls. bagging, 32 bls. flax waste.
J. H. Lodge, West Eldara, Antwerp, 13 bls. rags.
American Express Co., West Eldara, Antwerp, 298 rolls paper.
Forte Dupee & Sawyer Co., West Eldara, Antwerp, 86 bls. rags.
Train Smith Co., West Eldara, Antwerp, 362 bls. rags.
Castle & Overton, Inc., Bilderdyk, Holland, 2,181 bls. wood pulp.
Castle & Overton, Inc., Tomalva, Holland, 68 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING NOVEMBER 2, 1929

Castle & Overton, Inc., Cranford, France, 215 bls. rags.

BALTIMORE IMPORTS

WEEK ENDING NOVEMBER 2, 1929

National City Bank, Excello, Genoa, 103 bls. rags.
National City Bank, Excello, Marseilles, 313 bls. rags.
Congoleum Nairn Co., Excello, Leghorn, 256 bls. rags.
Congoleum Nain Co., Excello, Naples, 44 bls. rags.
Bulkley, Dunton & Co., Burgerdyk, ——, 1,500 bls. wood pulp.
Bulkley, Dunton & Co., Westpool, ——, 3,750 bls. wood pulp.
Castle & Overton, Inc., Bilderdyk, Holland, 820 bls. wood pulp.

Moore & White Co. Busy

The Moore & White Company, Philadelphia, Pa., report business very satisfactory. They are now erecting a large paper machine for the Scott Paper Company equipped with ball bearings throughout and all parts accurately balanced and tested to run at 1,500 feet per minute. They have recently supplied a machine of the finest type of construction to the same company, equipped with Minton Vacuum Drying System, driers 60 inch diameter for high speed.

The new Improved four-drum winder equipped with ball bearings throughout and drums driven independently with separate electric motors is meeting with great success, as is their new type two-drum winder.

A recent valuable money saving improvement on the M & W winder is the removable bottom slitter whereby a slitter blade is changed in same manner as top blade, both equipped with ball bearings.

The new redesigned rotary screen is also being recognized as a desirable machine for clean paper. An order has just been received for six screens after several months' tryout from a high grade mill.

Their new patented shower pipe is saving many satisfied customers costly filtered water.

The company has some large orders from the Pulp Bleaching Corporation for machinery used in the Wolf high density bleaching process which is being installed in many large mills.

A new high speed ball bearing friction clutch is now being placed on the market, specially designed for electrically driven machinery, which overcomes all objections to the use of clutches in high speed machinery.

Many mills are replacing their original M & W four-drum winders having 10 inch diameter drums with M & W four-drum winders having drums 15¼ inch, 18 inch, 20 inch and 24 inch diameters. These winders are very desirable for wide and fast running machines and large diameter rolls.

Recently a four drum super calender winder was added to the company's line and at once met with great success for finishing room equipment. In one of the leading mills after trying out one of these winders, 152 inch width, orders for several more were placed.

Government Paper Bids and Awards

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., November 6, 1929.—The Government Printing Office has received the following bids for 43,200 pounds of 21x32—72, white sulphite bond paper: Barton, Duer & Koch Paper Company, 6.6 and 6.5 cents per pound; Whitaker Paper Company, 7.37 cents; Old Dominion Paper Company, 6.544 cents; Cauthorne Paper Company, 6.519 cents; Reese & Reese, 6.715 cents; Dobler & Mudge, 7 cents; Import Paper Company, 6.25 cents; Walker Goulard Plehn Company, 6.9 cents; and Aetna Paper Company, 7.61 cents.

The R. P. Andrews Paper Company will furnish 2,125 sheets of 17x22 pink gummed paper at $6.92 per ream, bids for which were received on October 18.

Pulp Mill Knives for
Chippers
Barkers
Hogs
Shredders

Paper Mill Knives for
Washers
Beaters
Refiners
Jordans
Rotary Sheet Cutters
Trimmers
Flat Bed Cutters

Bolton Quality
TINNED BEATER BARS
Resist mild acid action
Used where bronze or stainless steel knives are not absolutely necessary.
Bolton tinning process produces a firm union of tin and steel, tin will not peel or flake off like plating.
Write for information. 2809

"It's the KNIVES that do the work"

John W. Bolton and Sons, Inc.
Lawrence, Massachusetts.
BOLTON QUALITY
Specialists in pulp and Paper Mill Knives For Twenty-Five Years

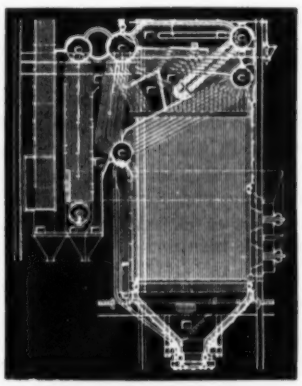
2809

THE SIGN OF GOOD FELTS

FELTS FOR ALL GRADES OF PAPER
THAT GIVE SATISFACTION

MADE BY **THE WATERBURY FELT CO.**
AT **SKANEATELES FALLS, N.Y.**

PAPER MAKERS FELTS AND JACKETS



BADENHAUSEN STEAM GENERATING UNITS

installed in some of the largest pulp and paper mills in the United States and Canada

MAXIMUM STEAM
AT
HIGHEST EFFICIENCY
WITH
LEAST CAPITAL INVESTMENT and OPERATING COSTS

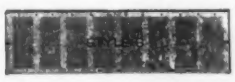
Result:—Enormous savings in cost of pulp and paper produced.

BADENHAUSEN CORPORATION
General Offices and Works
CORNWELLS HEIGHTS (PHILA.), PA.

Union Screen Plate Company
Fitchburg, Mass., U. S. A. Lennoxville, P. Q., Canada

UNION BRONZE

SCREEN PLATES FOR FLAT SCREENS
6 SLOTS—5 SLOTS—4½ SLOTS—4 SLOTS—PER INCH



Old Plates Reclosed and Re-cut to Accurate Gauge
Rolled Phosphor Bronze and Copper Plates for Rotary Screens
Sole Manufacturers of the Union Witham Screen Plate Vat and Fastener

New York Market Review

Office of the PAPER TRADE JOURNAL,
Wednesday, November 6, 1929.

The voilent fluctuations in the stock market during the past week have not been reflected in the local paper market. Prices in general remain steady. The prevailing feeling is that the release of funds which have been "frozen" in the security markets will have a distinctly favorable effect upon demand and production.

In the news print market production continues strong. The total output last week averaged about 86 per cent of capacity. There has been no over-stocking and shipments are going forward steadily.

The paper board market remains fairly active and slightly improved undertone. Fine paper holds to schedule on price and deliveries, with shipments being made in good volume. No variations have occurred in the coarse paper market, but wrapping paper is active in seasonal quantities.

Mechanical Pulp

Request for domestic and imported ground wood remains persistent. The production is not quite up to the demand, although shipments against contract are being made at a normal rate. Firm prices prevail.

Chemical Pulp

There have been no changes in the chemical pulp market during the past week. Demand is slightly below normal, but orders have been booked by both foreign and domestic producers for future shipment. The unbleached grade remains firm in price, with other quotations at last week's level.

Old Rope and Bagging

Excellent demand is made for old rope, both imported and domestic. Prices are firmer, with fair activity in the bagging market. Both roofing and scrap bagging are being shipped in normal amounts.

Rags

Trading in domestic rags remains unchanged, with increased inquiries from paper mills giving promise of firmer undertone. There was a fairly brisk business in roofing and mixed rags, with foreign rags in slight demand.

Waste Paper

In the waste paper market the lower grades of paper stock show slightly lower prices, notably print Manilas, at .65 to .70, Container .50 to .55, Bogus Wrapper, .65 to .70, Old Kraft machine, compressed bales, at $1.70 to $1.80, strictly over issue news at .70 to .80, and No. 1 Mixed at .35 to .45. Demand was steady, and the better grades are fairly active, especially soft white shavings, which remain firm and in good request, as does heavy book stock.

Twine

The local twine market exhibits increased activity, with good demand and steady prices generally. The finer grades show especial improvement, and an unusually busy condition is predicted by twine manufacturers for the Christmas holiday season.

Earlville Paper Box Co. Builds

EARLVILLE, N. Y., November 2, 1929.—The Earlville Paper Box Company has started construction of a new addition to its plant here which will provide greater facilities for manufacturing.

G. H. Lentz Goes With U. S. Forest Service

G. H. Lentz, Professor of Forest Extension at the New York State College of Forestry and for six years Director of the College of Forestry Camp on Cranberry Lake, has resigned in order to accept an appointment with the United States Forest Service. He submitted his resignation June 24 to become effective December 1. The appointment which he has accepted in the Forest Service is in the Branch of Research as Silviculturist at the Southern Forest Experiment Station at New Orleans. An erosion study in connection with flood control is being undertaken by the Southern Station and Prof. Lentz will be assigned to this problem.

Following his graduation from the Yale School of Forestry in 1917, Mr. Lentz enlisted in the 10th Engineers (Foresters) and served eighteen months over seas. Prior to coming with the Forestry College, he was Forester on the Arden Estate of W. A. Harriman. During 1921 and 1922 he taught at the State Ranger School at Wanakena. In 1923 he was called to Syracuse where he was assigned to the Extension Department and was made Director of the College Camp at Cranberry Lake.

While on leave in 1928, Prof. Lentz conducted a study in the hardwood bottomlands of Louisiana for the State Forester. This was a cooperative study carried on by the State and the Southern Forest Experiment Station. He will take up his new work in New Orleans January 1.

JESSE H. NEAL APPOINTED

(Continued from page 29)

activities of the American Paper and Pulp Association will be measured by the cooperation and support of those engaged in the manufacture and sale of pulp, paper and paper products, let us all get back of our new general manager and give him that moral and financial support which is at present so necessary to the proper development of our association and the industry.

New Colorado Paper Products Co.

[FROM OUR REGULAR CORRESPONDENT]

DENVER, Colo., November 1, 1929.—The Colorado Pulp and Paper Company, formerly the Myers Pulp and Paper Company, which was sold at a receiver's sale and purchased by I. Rude, Max Bronstine and Joseph Buchhalter, has been sold to the Colorado Paper Products Company, papers of incorporation filed under that name by M. Binstock, Max Bronstine and J. E. Robinson. The capitalization is $100,000. M. Binstock is president; Max Bronstine, vice president; J. P. Karsh, treasurer, and Joseph Pepper, secretary.

Four Fingers Crushed in Calendar Stack

[FROM OUR REGULAR CORRESPONDENT]

CORINTH, N. Y., November 2, 1929.—Claude Flewelling, fourth hand on No. 2 machine at the local plant of the International Paper Company, is recovering from injuries received when four fingers on his left hand were crushed when caught between the rolls of a calendar stack. He is receiving treatment from the company's physician and it is said that it will not be necessary to amputate the injured members.

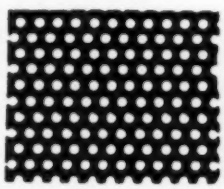
Ticonderoga Machine Works
Ticonderoga, N. Y., U. S. A.
MANUFACTURERS OF
WARREN IMPROVED CALENDER DOCTORS
With Flexible Blades, Universal Adjustment and Control (PATENTED)
WARREN IMPROVED PATENT DOUBLE DRUM WINDERS
Patent BALL VALVE Hydrant
Stock Circulating Systems and
other Paper Mill Specialties
SEND FOR OUR BULLETIN

THE CLARK-AIKEN CO.
Successors to
H. C. Clark & Son Machine Co.
PAPER MILL MACHINERY
LEE, MASS.
Revolving Paper Cutters—Rag Cutters—Cylinder Paper Machines—Washing and Beating Engines—Chilled Iron and Paper Calenders—Fan and Stuff Pumps—Engine Roll Bars and Bed Plates—
Cylinder Molds—Marshall Drives—Slitters and Rewinders—Reels—Dryers with Improved Packing Boxes—Wet Machines—Gun Metal and Rubber Rolls—Rolls Reground.

BURRS

BURRS

The Lindsay Wire Weaving Co.
14025 Aspinwall Avenue, Cleveland, Ohio
Manufacturers of
Lindsay Longcrimp and Spiral Weave Fourdrinier Wires
These wires are making records in large production of paper

Perforated Metal Screens
For Pulp and Paper Mills

STEEL, COPPER, BRASS, BRONZE, MONEL METAL and other Alloys punched for Centrifugal and Rotary Screens, Pulp Washers, Drainer Bottoms, Filter Plates, etc.
".065" Round
CHARLES MUNDT & SONS
63-65 FAIRMONT AVE. JERSEY CITY, N. J.

RAGS—BURLAP—BAGGING—ROPE
JUTE BUTTS, MAGAZINES, CATALOGS, OLD PAPERS, THREAD WASTE AND ALL GRADE OF RAGS CUT QUICKLY AND EFFICIENTLY WITH THE
GIANT The Standard of the World for 59 Years
Giant Rag Cutters have capacities of from 1 to 5 tons per hour

This is the GIANT 3-B CUTTER WITH A CAPACITY OF 3000 lbs. PER HOUR
TAYLOR, STILES & COMPANY, Riegelsville, N. J., U. S. A.
CANADIAN REPRESENTATIVES Waterous, Limited Brantford, Ont., Canada
R. J. MARX SOLE AGENTS FOR EUROPE 133-39 Finsbury Pavement, London, E. C.

C. K. WILLIAMS & CO. ANCHOR BRAND DRY COLORS AND FILLERS EASTON, PA. U.S.A.
Red
Brown
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} Oxides
Talc
Yellow Ochres,
Umbers, Agalite
C. K. Williams & Company
EASTON, PA.

Paper Stock
Supplies for Paper Manufacturers
A reliable source of supply.
Established for 43 years.
Write us your needs
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910 S. Michigan Ave. Chicago, Ill.
Long Distance Phones—
Harrison 2840-41-2842

Miscellaneous Markets

Office of the PAPER TRADE JOURNAL,
Wednesday, November 6, 1929.

BLANC FIXE.—The market for blanc fixe remains firm. Demand is steady. Pulp prices are $42.50 to $45.00 per ton in bulk quantities, and the powder is unchanged at 3¾ to 4½ cents per pound, in barrels, at works.

BLEACHING POWDER.—The bleaching powder market is seasonably active, with no change in prices. Quotations are $2.00 to $2.35 per 100 pounds, in large drums, at works.

CASEIN.—There has been no change in the casein market. Shipments are moving well on contract, with some spot sales, but on the whole a quiet condition prevails. The domestic casein is priced at 15½ to 16¾ cents per pound. The Argentine standard ground sells at from 16 to 16¼ cents, with finely ground going for 16½ to 17 cents per pound. These prices are in bags, and for car lot shipments.

CAUSTIC SODA.—The movement of caustic soda into consumption continues fairly steady. The unchanged prices are $2.90 to $2.95 for solid. For the flake and ground the quotations are $3.30 to $3.35 per 100 pounds, in large drums, at works.

CHINA CLAY.—Contracting is going on for the next year at about the usual pace, and prices for both imported and domestic clay remain at their previous level. Imported brands are from $15 to $25 per ton, at ship side, with domestic varieties selling at $8 to $13 per ton, at mine.

CHLORINE.—The chlorine market was quite active during the past week. There has been a satisfactory volume of business booked for 1930 delivery, at the new contract quotation of $2.85 per 100 pounds, in tanks, or multi-unit cars, at works. The spot demand was rather light, with prices practically unchanged.

ROSIN.—The recent changes in the rosin market were not repeated. Fairly large demand resulted from the prices now quoted. These are: for gum rosin used in paper making, $9.30 per 280 pounds in barrels, on dock. Wood rosin remains at $7.00 to $8.05 per 280 pounds, in bbls., at southern shipping points.

SALT CAKE.—Firm conditions hold in the salt cake market, with offerings still scarce. The quotations are from $18 to $21 per ton, with chrome salt cake running from $15 to $16 per ton, in bulk, at works.

SODA ASH.—Present demand is being filled promptly, and contract prices on soda ash in car lots, at works, are $1.32½ in bags and $1.55 in barrels.

STARCH.—The starch market remains practically unchanged, with requests being filled satisfactorily. Quotations are $3.92 per 100 pounds, in bags, and $4.19 per 100 pounds in barrels, at works, for special paper making starch.

SULPHATE OF ALUMINA.—Continued demand for sulphate of alumina brings a very firm tone to the market at present. Contract shipments go along at the usual rate. Commercial sulphate is quoted from $1.40 to $1.55, with iron free at $1.90 to $2.05 per 100 pounds, in bags, at works.

SULPHUR.—Conditions remain the same in the sulphur market, with no new developments in price or demand. Quotations are $18 per ton, at mine on thousand ton lots or over, with $20 the current price for smaller amounts, both on yearly contract. Nearby and spot carloads went for $21 per ton.

TALC.—The talc market remains steady. No radical changes were made. Domestic is quoted at from $16 to $18 per ton in bulk, at eastern mines. Imported talc ranges $18 to $20 per ton, in bags, ship side.

Northern Ontario's Big Pulp Cut

It is expected that over 150,000 cords of pulpwood will be taken out of the bush to supply the two mills of the Abitibi Power and Paper Company at Sturgeon Falls and Espanola. This is said to be one of the largest cuts ever undertaken by the company in the Northern Ontario district.

Market Quotations

Paper
(F. o. b. Mill)

Ledgers	11.00 @ 38.00
Bonds	9.00 @ 53.25
Writings—	
Extra Superfine	14.00 @ 32.00
Superfine	14.00 @ 32.00
Tub sized	10.00 @ 15.00
Engine sized	8.00 @ 11.00
Book, Cased—	
S. & S. C.	6.00 @ 7.50
M. F.	5.75 @ 7.00
Coated and Enamel	7.50 @ 12.00
Lithograph	7.50 @ 12.00
Tissues—Per Ream—	
White No. 1	.75 @ 1.00
Anti-Tarnish	1.35 @ 1.90
Colored	1.00 @ 2.00
White No. 2	.75 @ .80
Kraft	1.00 @ 1.10
Manila	.75 @ .80
Kraft—	
No. 1 Domestic	6.25 @ 6.50
No. 2 Domestic	5.25 @ 5.50
Southern	4.25 @ 4.50
Imported	6.50 @ 7.00
Manila—	
No. 1 Jute	9.00 @ 9.25
No. 2 Jute	7.75 @ 8.50
No. 1 Wood	4.75 @ 5.25
No. 2 Wood	4.00 @ 4.50
Butchers	3.75 @ 4.25
Fibre Papers—	
No. 1 Fibre	5.00 @ 5.50
No. 2 Fibre	4.75 @ 5.25
Common Bogus	2.75 @ 3.00
Screenings	3.00 @ 3.25
Card Middles	4.00 @ 5.00
Glassine—	
Bleached, basis 25 lbs.	13.00 @ 16.00
Bleached, basis 20 lbs.	15.00 @ 16.00

(Delivered New York)

News, per ton—	
Rolls, contract	62.00 @ —
Rolls, spot	62.00 @ —
Sheets	67.00 @ —
Side Runs	47.00 @ 52.00
Boards—per ton—	
News	37.50 @ 40.00
Straw	52.50 @ 55.00
Chip	35.00 @ 37.50
Binders' Boards	65.00 @ 70.00
Wood Pulp	80.00 @ 85.00
65 Test Jute Liner	52.50 @ —
85 Test Jute Liner	55.00 @ —
Sgl. Mla. Ll. Chip	47.50 @ 50.00

Mechanical Pulp
(On Dock)

No. 1 Imported—	
Moist	30.00 @ 32.00
Dry	32.00 @ 34.00

(F. o. b. Mill)

No. 1 Domestic	26.00 @ 30.00
Screenings	15.00 @ 20.00

Chemical Pulp
(On Dock, Atlantic Ports)

Sulphite (Imported)—	
Bleached	3.75 @ 4.25
Easy Bleaching	3.00 @ 3.15
No. 1 strong unbleached	2.75 @ 3.00
Mitscherlich unbleached	2.80 @ 3.25
No. 2 strong unbleached	2.40 @ 2.60
No. 1 Kraft	2.35 @ 2.65
No. 2 Kraft	2.30 @ 2.50
Sulphate—	
Bleached	3.60 @ 3.85

(F. o. b. Pulp Mill)

Sulphite (Domestic)—	
Bleached	3.40 @ 4.75
Easy Bleaching Sulphite	2.65 @ 3.00
News Sulphite	2.50 @ 2.70
Mitscherlich	3.00 @ 3.25
Kraft (Domestic)	2.10 @ 3.30
Soda Bleached	3.10 @ 3.25
Sulphate Screenings—	
Coarse	.75 @ .95
Refined	1.65 @ 1.85

Domestic Rags
New Rags
(Prices to Mill f. o. b. N. Y.)

Shirt Cuttings—	
New White, No. 1	11.00 @ 11.50
New White, No. 2	8.00 @ 8.50
Silesias No. 1	7.50 @ 8.00
New Unbleached	11.00 @ 11.50
New Blue Prints	5.25 @ 5.50
New Soft Blacks	5.25 @ 5.75
Blue Overall	7.50 @ 8.00
Washables	4.75 @ 5.25
Fancy	5.75 @ 6.25
Mixed Khaki Cuttings	4.75 @ 5.25
Pink Corset Cuttings	8.00 @ 8.50
O. D. Khaki Cuttings	5.15 @ 5.75
Men's Corduroy	3.75 @ 4.25
New Mixed Blacks	3.50 @ 3.75

Old Rags

White, No. 1—	
Repacked	5.50 @ 6.00
Miscellaneous	4.50 @ 5.00
White, No. 2—	
Repacked	3.00 @ 3.50
Miscellaneous	2.50 @ 2.75
St. Soiled, White	2.00 @ 2.15
Thirds and Blues—	
Repacked	2.25 @ 2.50
Miscellaneous	1.75 @ 2.00
Black Stockings	3.25 @ 3.75
Roofing Rags—	
Cloth Strippings	1.70 @ 1.80
No. 1	1.70 @ 1.80
No. 2	1.55 @ 1.65
No. 3	1.30 @ 1.40
No. 4	1.25 @ 1.35
No. 5A	.90 @ 1.05

Foreign Rags
New Rags

New Dark Cuttings	2.50 @ 3.00
New Mixed Cuttings	2.75 @ 3.25
New Light Silesias	7.00 @ 7.50
Light Flannelettes	7.50 @ 8.00
Unbleached Cuttings	10.00 @ 11.00
New White Cuttings	10.50 @ 11.50
New Light Oxfords	7.00 @ 7.50
New Light Prints	5.50 @ 6.50

Old Rags

No. 1 White Linens	7.50 @ 8.25
No. 2 White Linens	5.75 @ 6.75
No. 3 White Linens	4.75 @ 5.25
No. 4 White Linens	3.00 @ 3.50
No. 1 White Cotton	5.50 @ 6.50
No. 2 White Cotton	4.50 @ 5.50
No. 3 White Cotton	3.00 @ 4.00
No. 4 White Cotton	1.90 @ 2.15
Extra Light Prints	2.75 @ 3.25
Ord. Light Prints	2.25 @ 2.50
Med. Light Prints	2.00 @ 2.10
Dutch Blue Cottons	2.25 @ 2.40
French Blue Linens	2.75 @ 2.85
German Blue Linens	2.35 @ 2.55
German Blue Cottons	2.15 @ 2.25
Checks and Blues	1.85 @ 2.00
Lindsay Garments	1.85 @ 1.95
Dark Cottons	1.55 @ 1.60
Old Shopperies	1.50 @ 1.55
New Shopperies	1.50 @ 1.60
French Blues	2.10 @ 2.25

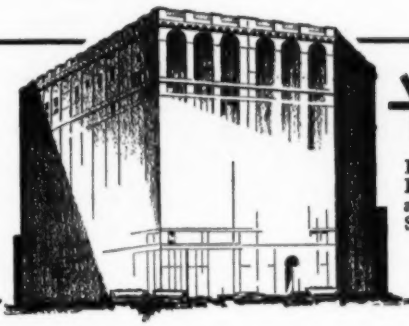
Old Rope and Bagging
(Prices to Mill f. o. b. N. Y.)

Gunny No. 1—	
Foreign	1.60 @ 1.70
Domestic	1.70 @ 1.75
Wool Tares, light	1.60 @ 1.65
Wool Tares, Heavy	1.60 @ 1.70
Bright Bagging	1.60 @ 1.70
Small Mixed Rope	1.25 @ 1.40
Manila Rope—	
Foreign	4.40 @ 4.60
Domestic	4.75 @ 5.00
New Burlap Cut	2.75 @ 3.00
Hessian Jute Threads—	
Foreign	3.50 @ 4.00
Domestic	3.25 @ 3.50

Old Waste Papers
(F. o. b. New York)

Shavings—	
Hard, white, No. 1	3.25 @ 3.50
Hard, white, No. 2	2.40 @ 2.55
Soft, White, No. 1	2.60 @ 2.70
White envelope cuttings	3.00 @ 3.50
Flat Stock—	
Stitchless	1.45 @ 1.55
Overissue Mag.	1.45 @ 1.55
Solid Flat Book	1.40 @ 1.50
Crumpled No. 1	1.00 @ 1.10
Solid Book Ledger	2.00 @ 2.10
Ledger Stock	1.40 @ 1.50
New B. B. Chips	.65 @ .75
Manilas—	
New Env. Cut	2.40 @ 2.60
New Cuttings	1.50 @ 1.75
Extra No. 1 old	1.25 @ 1.35
Print	.65 @ .70
Container	.50 @ .55
Bogus Wrapper	.65 @ .70
Old Kraft Machine Compressed bales	1.70 @ 1.80
News—	
No. 1 White News	1.65 @ 1.75
Strictly Overissue	.70 @ .80
Strictly Folded	.60 @ .65
No. 1 Mixed Paper	.35 @ .45
Common Paper	.30 @ .35

Displayed in The Fifth Avenue Building are many leading lines of merchandise



Broadway and Fifth Avenue, at Madison Square, New York

A glance at the directory in the lobby of this building will give you some conception of the variety of merchandise represented here. Paper, greeting cards, stationery, men's wear, women's wear, housefurnishings, toys, novelties, pottery, glassware, and kindred lines.

Their manufacturers are the leaders in their lines. Small wonder that experienced buyers, from all parts of the world, make The Fifth Avenue Building a New York headquarters! In this one building, on a single buying trip, they can fill many of their seasonal requirements.

The Fifth Avenue Building is in the midst of New York business. The shopping and financial districts are but a few minutes distant. Buses and surface cars pass the door. An elevated line is within a block. A subway enters the building. Pennsylvania Station is only ten minutes by subway. Grand Central Station is thirteen. There is a booth in the lobby of the building to help buyers locate the different lines within the building and to give information concerning places of civic interest and amusement.

The Fifth Avenue Building

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St. Regis Paper Company

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Newsprint
Catalog and Directory
Packers Oiled Manila
Fibre Wrapping
Specialties

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NO SAND RENEWALS
CRYSTAL CLEAR WATER ALWAYS

HUNGERFORD & TERRY, INC.
CLAYTON, N. J.

Twines
(F. o. b. Mill)

Cotton—			
No. 1	.39	@	.40
No. 2	.37	@	.38
No. 3	.36	@	.37
B. C., 18 basis	.38	@	.40
A. B. Italian, 18 basis	.48	@	.53
Finished Jute—			
Dark 18 basis	.24	@	.25
Light 18 basis	.27	@	.28
Jute Wrapping, 3-6 Ply—			
No. 1	.19	@	.21
No. 2	.18	@	.20
Tube Rope—			
4-ply and larger	.16	@	.17
Fine Tube Yarn—			
5-ply and larger	.21	@	.25
4-ply	.25	@	.29
3-ply	.28	@	.32
Unfinished India—			
Basis	.13	@	.14
Paper Makers Twine			
Balls	.11	@	.12
Box Twine, 2-3 ply	.15	@	.17
Jute Rope	.17	@	.19
Amer. Hemp, 6	.29	@	.31
Sisal Hay Rope—			
No. 1 Basis	.16	@	.18
No. 2 Basis	.14	@	.16
Sisal Lath Yarn—			
No. 1	.14	@	.16
No. 2	.12	@	.14
Manila Rope	.22	@	.24

CHICAGO

Paper
(F. o. b. Mill)

Rag Bond	.30	@	.53¼
Water Marked Sulphite Bond	.09	@	.12
Sulphite Bond	.06¾	@	.11
Superfine writing	.18	@	.24
No. 1 fine writing	.14	@	.18
No. 2 fine writing	.12	@	.14
No. 3 fine writing	.08½	@	.12
No. 1 M. F. Book	.06½	@	.07¼
No. 2 M. F. Book	.05¼	@	.06¼
No. 1 S.&S.C. Book	.06¾	@	.07¾
No. 2 S.&S.C. Book	.05¾	@	.06½
Coated Book	.07½	@	.12
Coated Label	.07½	@	.10
No. 1 Manila	.04¼	@	.05¾
No. 1 Fibre	.04¾	@	.05¼
No. 2 Manila	.04¼	@	.04¾
Butcher's Manila	.04	@	.04½
No. 1 Kraft	.06¼	@	.06½
Southern Kraft	4.25	@	4.50
No. 2 Kraft	.04	@	.04¼
Wood Tag Boards	.04¼	@	.06¼
Sulphite Screenings	.03	@	.03¾
Manila Tissue—			
24x36 Sheet	.07	@	.07¼
White Tissue—			
20x30 Sheet	.07¼	@	.07½
(Delivered Central Territory)			
News, per ton—			
Rolls, contract	62.00	@	—
Sheets	67.00	@	—
Boards, per ton—			
Plain Chip	37.50	@	42.50
Solid News	47.50	@	—
Solid News	40.00	@	45.00
Manila Lined Chip	50.00	@	55.00
Container Lined—			
85 Test	65.00	@	70.00
100 Test	70.00	@	—

Old Papers
(F. o. b. Chicago)

Shavings—			
No. 1 Hard White	2.20	@	2.25
White Env. Cuttings	2.40	@	2.50
No. 1 Soft Shavings	2.00	@	2.10
No. 1 Mixed	.90	@	1.00
No. 2 Mixed	.70	@	.75
Ledger & Writings	1.25	@	1.35
Solid Books	1.25	@	1.30
Blanks	1.40	@	1.50
Krafts	1.60	@	1.75
New Kraft Cuts	2.15	@	2.25
Manila Envelope Cuttings	1.65	@	1.75
Ex. No. 1 Manila	1.30	@	1.45
Print Manila	.75	@	.80
Folded News (overissue)	.80	@	.85
Old Newspapers—			
No. 1	.65	@	.70
No. 2	.60	@	.65
Mixed Papers—			
No. 1	.60	@	.65
Roofing Stocks—			
(F. o. b. Chicago, net cash)			
No. 1	30.00	@	—
No. 2	28.00	@	—

PHILADELPHIA

Paper
(F. o. b. Mill)

Bonds	.06	@	.40
Ledgers	.09	@	.40
Writings—			
Superfine	.12½	@	.18
Extra fine	.18	@	.22
Fine	.17	@	.26
Fine, No. 2	.15	@	.25
Fine, No. 3	.10	@	.20
Book, M. F.	.05½	@	.07
Book, S. S. & C.	.06	@	.07½
Book, Coated	.09½	@	.16
Coated Lithograph	.07	@	.11
Label	.07	@	.11
No. 1 Jute Manila	.08	@	.09
Manila Sul., No. 1	.04	@	.05½
Manila No. 2	.03	@	.04
No. 2 Kraft	.06	@	.06½
No. 1 Kraft	.06½	@	.07
Common Bogus	.03½	@	.04
(Delivered Philadelphia)			
News Print Rolls	62.00	@	—
Straw Board	52.50	@	75.00
News Board	40.00	@	40.00
Chip Board	38.00	@	40.00
Wood Pulp Board	85.00	@	95.00
Binder Boards—			
No. 1, per ton	75.00		
No. 2, per ton	70.00		
Carload lots	68.00	@	70.00
Tarred Felts—			
Regular	55.50	@	57.00
Slaters (per roll)	.84	@	.94
Best Tarred, 1-ply (per roll)	1.95	@	2.10
Best Tarred, 2-ply (per roll)	1.50	@	1.60
Best Tarred, 3-ply	2.00	@	2.25

Domestic Rags (New)
(Price to Mill, f. o. b. Phila.)

Shirt Cuttings—			
New White, No. 1	.10¼	@	.11
New White, No. 2	.07	@	.07½
Light Silesias	.07	@	.07½
Silesias, No. 1	.07	@	.09
Black Silesia, soft	.05	@	.05½
New Unbleached	.10½	@	.11
Washable, No. 1	.04½	@	.05
Blue Overall	.07½	@	.08
Cottons—According to grades—			
Washable, No. 2	.03	@	—
New Blue	.03	@	.03½
Fancy	.05½	@	.06
New Black Soft	.05	@	.05¾
New Light Seconds	.02½	@	.03
New Dark Seconds	1.85	@	2.00
Khaki Cuttings—			
No. 1 O. D.	.05½	@	.05¾
No. 2 Mixed	.04½	@	.04¾
Corduroy	.03	@	.03½
New Canvas	.08½	@	.09
New Black Mixed	.03¾	@	.04½

Bagging
(F. o. b. Phila.)

Gunny, No. 1—			
Foreign	1.50	@	1.60
Domestic	1.75	@	—
Manila Rope	3.50	@	4.00
Sisal Rope	1.50	@	—
Mixed Rope	1.10	@	1.25
Scrap Burlaps—			
No. 1	1.50	@	1.60
No. 2	1.10	@	1.20
Wool Tares, heavy	3.00	@	—
Mixed Strings	1.15	@	1.25
No. 1, New Light Burlap	2.50	@	2.75
New Burlap Cuttings	2.00	@	2.25

Old Papers
(F. o. b. Phila.)

Shavings—			
No. 1 Hard White	3.20	@	3.25
No. 2 Hard White	2.75	@	3.00
No. 1 Soft White	2.80	@	2.90
No. 2 Soft White	1.80	@	1.90
No. 1 Mixed	1.50	@	1.60
No. 2 Mixed	.90	@	1.00
Solid Ledger Stock	1.85	@	1.90
Writing Paper	1.60	@	1.65
No. 1 Books, heavy	1.40	@	1.50
No. 2 Books, light	1.05	@	1.15
No. 1 New Manila	2.40	@	2.50
No. 1 Old Manila	1.50	@	1.60
Print Manila	.95	@	1.00
Container Manila	.85	@	.90
Old Kraft	2.25	@	2.50
Common paper	.50	@	.55
No. 1 Mixed Paper	.60	@	.65
Straw Board, Chip	.60	@	.65
Binders Board, Chip	.60	@	.65
Overissue News	.80	@	.85
Old Newspaper	.50	@	.55

Domestic Rags (Old)

White, No. 1—			
Repacked	4.25	@	4.50
Miscellaneous	3.50	@	3.75
White, No. 2	2.00	@	2.25
Thirds and Blues—			
Repacked	2.00	@	2.25
Miscellaneous	1.60	@	1.80
Black Stockings (Export)	3.90	@	4.25
Roofing Stock—			
Foreign No. 1	1.65	@	1.75
Repacked	.01¾	@	.02
No. 2	1.30	@	1.35
No. 3 (Roofing)	1.15	@	1.25
No. 4	1.00	@	1.15
No. 5A	.75	@	.85
B	.65	@	.75
C	.65	@	.75

BOSTON

Paper
(F. o. b. Mill)

Ledgers—			
Sulphite	.07½	@	.12½
Rag content	.15	@	.30
All rag	.38	@	.52½
Bonds—			
Sulphite	.06½	@	.11½
Rag content	.15	@	.30
All rag	.36½	@	.65
Writings	.06½	@	.20
Superfines	.11	@	.31
Book, Super	.06	@	.09
Book, M. F.	.05½	@	.08½
Book, Coated	.08½	@	.18
Coated Litho	.09	@	.12
Label	.09½	@	.15
Jute Manila No. 1	.11	@	.13
Manila, Sul. No. 1	.04¾	@	.06½
Manila, Sul. No. 2	.03¾	@	.04½
No. 1 Kraft	.06¼	@	.06½
No. 2 Kraft	.04½	@	.05½
Common Bogus	.02	@	.02¾
Delivered New England points			
News Print Rolls	61.50	@	—
Straw Boards, rolls	.09		52.50
Straw Board in Sheets, basis 35s to 70s	54.50	@	55.00
Filled News Board	37.50	@	40.00
Chip Board	35.00	@	37.50
Single Manila Lined Chip	50.00	@	—
Single White, Patent Coated Newsboard			
Bender	65.00	@	80.00
Wood Pulp Board	80.00	@	85.00
Binder Boards	70.00	@	75.00

(F. o. b. Mill)

Tarred Felts—			
Regular, carload lots	65.00	@	—

Old Papers
(F. o. b. Boston)

Shavings—			
No. 1 Hard White	3.25	@	3.75
No. 2 Hard White	2.60	@	2.90
No. 1 Soft White	2.40	@	2.50
No. 1 Mixed	1.10	@	1.15
No. 2 Mixed	.85	@	.90
Solid Ledger Stock	2.35	@	2.45
No. 1 Books, Heavy	1.50	@	1.55
No. 1 Books, Light	—	@	1.15
Manila Env. Cuttings	2.00	@	2.25
No. 1 Old Manila	.90	@	1.00
White Blank News	1.50	@	1.60
Old Kraft	1.75	@	1.80
Print Manila	.80	@	.90
No. 1 Mixed Paper	.45	@	.50
Overissue News	.70	@	.75
Old Newspapers	.55	@	.57½
Box Board, Chip	.55	@	.60

Bagging
(F. o. b. Boston)

Gunny No. 1—			
Foreign	1.40	@	1.50
Manila Rope—			
Foreign	4.37½	@	4.50
Domestic	4.50	@	4.75
Transmission Rope	—	@	3.00
Mixed Strings	1.00	@	—
Jute Wool Strings	1.00	@	1.05
Jute Carpet Threads	1.05	@	1.15
Scrap Burlaps	1.37½	@	1.50
Scrap Sisal	1.80	@	2.00
Scrap Sisal for shredding	1.85	@	2.00
Wool Tares, heavy	1.60	@	—
New Burlap Cutting	1.90	@	2.00
Australian Wool Pouches	3.00	@	3.12½

Domestic Rags (New)
(F. o. b. Boston)

Shirt Cuttings—			
New White No. 1	.09½	@	.10
Silesias, No. 1	.06	@	.06¼
New Unbleached	.10	@	.10½
Fancy	.04	@	.04½
Washable	.04	@	.04½
Cottons—According to grades			
Blue Overalls	.06¼	@	.06¾
New Black, soft	.04	@	.04¾
Khaki Cuttings	.04	@	.04¾
O. D. Khaki	.05	@	—
Corduroy	.03	@	.03½
New Canvas	.08	@	.08½

Domestic Rags (Old)
(F. o. b. Boston)

Canvas	.04½	@	—
White No. 1—			
Repacked	4.75	@	5.25
Miscellaneous	5.00	@	—
White No. 2—			
Repacked	.04½	@	.05
Miscellaneous	.03½	@	.04
Twos and Blues	2.75	@	3.00
Thirds and Blues—			
Repacked	2.25	@	2.50
Miscellaneous	1.75	@	1.90
Black Stockings	—	@	4.00
Roofing Stock—			
No. 1	1.65	@	1.75
No. 2	1.45	@	1.55
No. 3	1.05	@	1.10
No. 4	1.10	@	1.15

Foreign Rags
(F. o. b. Boston)

Dark Cottons	—	@	1.55
New No. 1 Shirt Cuttings	9.00	@	9.50
Dutch Blues	2.00	@	2.10
Lace Curtains	4.75	@	5.00
New Checks & Blues	4.25	@	4.60
Old Fustians	1.90	@	2.00
Old Linsey Garments	1.80	@	1.85

TORONTO

Paper
(F. o. b. Mill)

Bond—			
No. 1 Sulphite	.12½	@	—
No. 2 Sulphite	.10¾	@	—
No. 1 Colored	.13½	@	—
No. 2 Colored	.11¼	@	—
Ledgers (sulphite)	—	@	—
Ledgers, No. 1	.36	@	—
Ledgers, No. 2	.27	@	—
Writing	.09½	@	.10
Book—			
No. 1 M. F. (carloads)	7.50	@	—
No. 2 M. F. (carloads)	7.25	@	—
No. 3 M. F. (carloads)	7.00	@	—
No. 1 S. C. (carloads)	8.00	@	—
No. 2 S. C. (carloads)	7.75	@	—
No. 3 S. C. (carloads)	7.50	@	—
No. 1 Coated and Litho	13.25	@	—
No. 2 Coated and Litho	12.25	@	—
No. 3 Coated and Litho	11.50	@	—
Coated tinted	14.50	@	—
Wrapping—			
Rag Brown	4.95	@	—
White Wrap	5.25	@	—
"B" Manila	3.80	@	—
No. 1 Manila	6.65	@	—
Fiber	6.65	@	—
Kraft, M. F.	7.00	@	—
M. G.	7.00	@	—

(Delivered Toronto)

News, per ton—			
Rolls (contract)	61.50	@	62.00
Sheets	67.00	@	—

Pulp
(F. o. b. Mill)

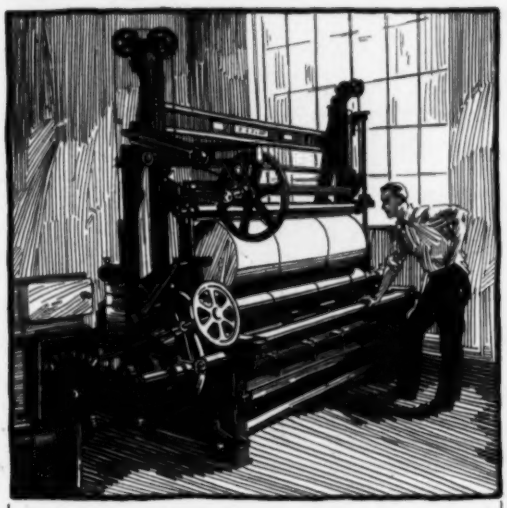
Ground Wood	30.00	@	31.00
Sulphite easy bleaching	60.00	@	—
Sulphite news grade	60.00	@	—
Sulphite, bleached	77.00	@	78.00
Sulphate	60.00	@	—

Old Waste Paper
(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	3.00	@	—
Soft White Book Shavings	2.85	@	—
White Blk. News	1.60	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.40	@	—
Light and Crumpled Book Stock	1.25	@	—
Ledgers and Writings	1.50	@	—
Solid Ledgers	1.50	@	—
Manilas—			
New Manila Cut	1.50	@	—
Printed Manilas	1.00	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.85	@	—
Strictly Folded	.85	@	—
No. 1 Mixed Paper	.65	@	—

Domestic Rags
(Price to mills, f. o. b. Toronto)

No. 1 White Shirt Cuttings	.09¾	@	.10
Fancy Shirt Cuttings	.06	@	.06¼



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PAPER TRADE JOURNAL
ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-EIGHTH YEAR

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